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1.3 504 S L1 FULL

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FILE 'CAPLUS' ENTERED AT 20:21:01 ON 16 MAR 2010 66 S J.3

FILE 'REGISTRY' ENTERED AT 20:29:36 ON 16 MAR 2010

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FILE COVERS 1907 - 16 Mar 2010 VOL 152 ISS 12 FILE LAST UPDATED: 15 Mar 2010 (20100315/ED) REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009 USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

CAplus now includes complete International Patent Classification (IPC)

reclassification data for the first quarter of 2010.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

-> d bib abs hitstr 1-66 14

- ANSWER 1 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN L4
- AN 2010:85102 CAPLUS
- 152:144974
- Preparation of nucleoside phosphoramidate prodrugs as antiviral agents
- Sofia, Michael Joseph; Du, Jinfa; Wang, Pelyuan; Nagarathnam, Dhanapalan PA Pharmasset, Inc., USA U.S. Pat. Appl. Publ., 77pp.; Chemical Indexing Equivalent to 149:426212
- (WO) CODEN: USXXCO
- English FAN.CNT 2

	PATENT NO.					KIND		DATE			APPLICATION NO.							
PI	US AU CA	20100016251 2008232827 2682230 2008121634 W: AE, AG, AL, CA, CH, CN, FI, GB, GD, KG, KM, KN, ME, MG, MK,			Al Al Al AZ AM, AO CO, CR GE, GH KP, KR MN, MW		20100121 20081009 20081009 20081009 AT, AU, CU, CZ, GM, GT, KZ, LA, MX, MY,		AZ, DE, HN, LC, MZ, SE,	US 2008-53015 AU 2008-232827				BR, EC, IN, LU, NZ, SV,	2 2 2 2 2 8W, EE, IS, LY,	2008032 2008032 2008032 2008032 BW, BY, I EE, EG, I IS, JP, I LY, MA, I OM, PG, I		
		RW:	AT, IE, TR, TG,	BE, IS, BF, BW,	BG, IT, BJ, GH,	CH, LT, CF, GM,	CY LU CG KE	UG, CZ, LV, CI, LS, MD,	DE, MC, CM, MW,	DK, MT, GA, MZ,	EE, NL, GN, NA,	ES, NO, GQ,	FI, PL, GW,	FR, PT, ML,	GB, RO, MR,	SE, NE,	SI,	SK
	MX US US US					A A P P	20100212 20091110 20070330 20071024 20080321			KR 2009-722652								

Disclosed herein are nucleoside phosphoramidates prodrugs I, wherein R and

R3 are independently H, alkyl, cycloalkyl, alkylamine, hydroxyalkyl, CIRSH, alkyl-sulfonyl, (CRIS) NHE (NH) NHZ, (IH-india2n)-altylinethyl, (IH-india2n)-4-yl)methyl, acyl, aryl, aryl-alkyl; R3 and R both are alkyl; R3 and R together are alkylidene so as to form a spiro ring; R3 is H and R and R2 together are (CRIS) no as to form a cyclic ring that includes the adjoiring N and C atoms, R is H and R3 and R2 together are (CRIS). No as to form a cyclic ring; that includes the adjoiring N and C atoms, n is Z to form a cyclic ring; that includes the adjoiring N and C atoms, n is Z CRICHIGIS, CRIS, C

encephalitis virus. 1064684-23-6P 1015255-46-5P 1064684-25-8P 1064684-28-1P 1064684-32-7P 1064684-33-8P 1064684-36-1P 1064684-38-3P 1064684-41-8P 1064684-42-9P 1064684-43-0P 1064684-44-1P 1064684-45-2P 1064684-50-9P 1064684-52-1P 1064684-53-2P 1064684-58-7P 1064684-63-4P 1064684-64-5P 1064684-66-7P 1064684-68-90 1064684-70-3P 1064684-71-4P 1064684-73-6P 1064684-74-7P 1064684-75-8P 1064684-76-9P 1064684-77-0P 1064684-78-1P 1064684-79-2P 1064684-80-5P 1064684-81-6P 1064684-82-7P 1064684-88-3P 1064684-92-9P 1064685-44-4P 1064685-46-6P 1064685-47-7P

RI: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of nucleoside phosphoramidate prodrugs as antiviral agents)
N 1015255-46-5 CAPU-3
N 1-Alanine, N-[2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
methyl seter (CA INDEX NAME)

Absolute stereochemistry.

RN 1064694-23-6 CAPLUS
CN L-Valine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
methyl ester (CA INDEX NAME)

RN

 $\label{local-control} $$1064684-24-7$ CAPLUS$ $L-Valine, $N=((2^nR)-P-(4-bromopheny1)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)$

Absolute stereochemistry.

1064684-25-8 CAPLUS L-Alanine, N-[(2'R)-P-(4-bromophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-28-1 CAPLUS L-Valine, N-[(2|R)-P-(4-bromopheny1)-2'-deoxy-2'-fluoro-2'-methy1-5'-cytidyly1)-, methy1 ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-29-2 CAPLUS

L-Valine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-cytidylyl]-,

10/560 88

methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-30-5 CAPLUS

N L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-32-7 CAPLUS

Glycine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl)-,
methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-33-8 CAPLUS

CN L-Alanine, N-[(2/R)-2'-deoxy-P-(2,4-dichlorophenyl)-2'-fluoro-2'-methyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-36-1 CAPLUS

IN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl)-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-37-2 CAPLUS L-Alanine, N-[(2/R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-38-3 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-fluorophenyl)-2'-methyl-5'-RN CN uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

- 1064684-41-8 CAPLUS
- L-Alanine, N-[(2'R)-P-(4-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'uridylyl]-, methyl ester (CA INDEX NAME)

- 1064684-42-9 CAPLUS L-Alaine, N=[(2'R)-2'-deoxy-P-(3,4-dichlorophenyl)-2'-fluoro-2'-methyl-5'-uridy'yl|-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

CN

1064684-43-0 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, 1-methylpropyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

1064684-44-1 CAPLUS L-Alanine, N-((2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, l-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

1064684-45-2 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-methoxyphenyl)-2'-methyl-5'-uridylyl]-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-46-3 CAPLUS

L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-fluorophenyl)-2'-methyl-5'-

uridylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

 $\begin{array}{lll} 1064684-47-4 & CAPLUS \\ L-Alanine, & N-\{(2^2R)-2^2-deoxy-2^2-fluoro-P-(4-fluorophenyl)-2^2-methyl-5^2-uridylyl]-1 & 1-methylethyl ester & (CA INDEX NAME) \\ \end{array}$

Absolute stereochemistry.

- 1064684-48-5 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-fluoro-phenyl)-2'-methyl-5'-uridylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

- 1064684-49-6 CAPLUS
- L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-methoxypheny1)-2'-methy1-5'-uridy1y1)-, 1-methylethyl ester (CA INDEX NAME)

1064684-50-9 CAPLUS L-Alanine, N-[(2'R)-P-(2-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'uridylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-52-1 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-P-(2,4-dichlorophenyl)-2'-fluoro-2'-methyl-5'-uridylyl|-, butyl seter (CA INDEX WAME)

Absolute stereochemistry.

1064684-53-2 CAPLUS L-Alanine, N-{(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-(4-methylphenyl)-5'-uridylyl,-1-methylethyl ester (CA INDEX NAME)

1064684-54-3 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-fluorophenyl)-2'-methyl-5'uridylyl]-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-55-4 CAPLUS L-Alanine, N= $\{(2^tR)=2^t-deoxy-P-(3,4-dichloropheny1)=2^t-fluoro-2^t-methyl-5^t-deoxy-P-(3,4-dichloropheny1)=2^t-fluoro-2^t-deoxy-P-(3,4-dichloropheny1)=2^t-fluoro-2^t-deoxy-P-(3,4-dichloropheny1)=2^t-fluoro-2$ uridylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-56-5 CAPLUS L-Alanine, N-{(2'R)-P-(2-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl], 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-57-6 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-methoxyphenyl)-2'-methyl-5'uridylyl]-, phenylmethyl ester (CA INDEX NAME)

1064684-58-7 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, pentyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-59-8 CAPLUS

L-Alanine, N-[[P(R),2'R]-P-(4-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-60-1 CAPLUS L-Alanine, N-{(2'R)-P-(4-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl]-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-61-2 CAPLUS

L-Alanine, N-[(2'R)-P-(4-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-

uridylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-62-3 CAPLUS L-Alanine, N-(2/R)-2 deoxy-2 fluoro-2 methyl-P-(4-methylphenyl)-5 uridylyl]- butyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-63-4 CAPLUS L-Alanine, N-{(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-(4-methylphenyl)-5'-uridylyl], phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-64-5 CAPLUS

Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, 5'-[phenyl N-[(1S)-1-(methoxycarbonyl)propyl]phosphoramidate], (2'R)- (CA INDEX

RN

1064684-66-7 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl)-, (4-fluorophenyl]methyl ester (CA INDEX NAME)

Absolute stereochemistry.

 $\label{local-equation} $$1064684-67-8$$ $$CAPLUS$$ $L-Alanine, $N-[(2^R)-2^*-deoxy-2^*-fluoro-2^*-methyl-P-phenyl-5^*-uridylyl]-, $$$1064684-67-8$$ $$CAPLUS$$ $$L-Alanine, $N-[(2^R)-2^*-deoxy-2^*-fluoro-2^*-methyl-P-phenyl-5^*-uridylyl]-, $$$$1064684-67-8$$ $$CAPLUS$$ $$L-Alanine, $N-[(2^R)-2^*-deoxy-2^*-fluoro-2^*-methyl-P-phenyl-5^*-uridylyl]-, $$$$$1064684-67-8$$ $$CAPLUS$$ $$CAPLUS$ 3-methylbutyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-68-9 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-P-(3,4-dichloropheny1)-2'-fluoro-2'-methy1-5'-uridyly1]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-69-0 CAPLUS L-Alanine, N-((2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, cyclohexyl ester (CA INDEX NAME)

RN 1064684-70-3 CAPLUS

D-Alanine, N-[(2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
butyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-71-4 CAPLUS
CN D-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-72-5 CAPLUS
CN D-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
phenyl-methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-73-6 CAPLUS CN L-Alamine, N-[(2'R)-P-(2-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl|-, butyl| ester (CA INDEX NAME)

 $\label{local-control} $$1064684-74-7$ $$CAPLUS$ $$L-Alanine, N-(2-16)=(0-16)=$

Absolute stereochemistry.

1064684-75-8 CAPLUS L-Alanine, N-{(2'R)-2'-deoxy-2'-fluoro-P-(4-fluorophenyl)-2'-methyl-5'-uridylyl]-, cyclohexyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-76-9 CAPLUS L-Alanine, N-[(2'R)-P-(4-bromophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'uridylyl]-, cyclohexyl ester (CA INDEX NAME)

 $\label{eq:capture} 1064684-77-0 \quad CAPLUS \\ \mbox{Origine, 2'-deox,2'-fluoro-2'-methyl-, 5'-[phenyl N-(18)-1](l-methylothoxy) carbonyl propyl phosphoramidate], (2'R)- (CAPLUS) \\ \mbox{CAPLUS} \\ \mbox{CAPLU$ INDEX NAME)

Absolute stereochemistry.

RN

1064684-78-1 CAPLUS
Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, 5'-[phenyl
N-[(18)-1-[(cyclohexyloxy)oxrbonyl]propyl]phosphoramidate], (2'R)- (CA INDEX NAME)

Absolute stereochemistry.

1064684-79-2 CAPLUS RN

Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, 5'-[4-fluorophenyl N-[(1S)-1-[(cyclohexyloxy)carbonyl]propyl]phosphoramidate], (2'R)- (CA CN INDEX NAME)

RN 1064684-80-5 CAPLUS
CN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
2-fluoroethyl seter (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-81-6 CAPLUS CN 1-Alamine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, 2,2-difluoroethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-82-7 CAPLUS

L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl)-,
2,2,2-trifluoro-1-(trifluoromethyl)ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-85-0 CAPLUS
CN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
2-fluoro-1-(fluoromethyl)ethyl ester (CA INDEX NAME)

RN

1064684-88-3 CAPLUS L-Alaine, N-[(2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl)-, cyclopropylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-92-9 CAPLUS

Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, 5'-[phenyl N-[(1S)-1-[(cyclopentyloxy)carbonyl]propyl]phosphoramidate], (2'R)- (CA INDEX NAME)

Absolute stereochemistry.

1064685-44-4 CAPLUS

Glycine, N-[[P(S),2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064685-46-6 CAPLUS

L-Alanine, N-[[P(8),2'R]-P-(4-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl]-, 1-methylethyl ester (CA INDEX NAME)

- 1064685-47-7 CAPLUS L-Alanine, N-[[P(S),2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'uridylyl]-, cyclohexyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (preparation of nucleoside phosphoramidate prodrugs as antiviral agents) 1064684-27-0 CAPLUS
- L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-cytidylyl]-, methyl ester (GA INDEX NAME)

Absolute stereochemistry.

H2N

- ANSWER 2 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:1507900 CAPLUS
- DN 152:183433
- Anti-hepatitis C virus activity of novel \(\beta-d-2'-C-methyl-4'-azido\) pyrimidine nucleoside phosphoramidate prodrugs
- Rondla, Ramu; Coats, Steven J.; McBrayer, Tamara R.; Grier, Jason; Johns, Melissa; Tharnish, Phillip M.; Whitaker, Tony; Zhou, Longhu; Schinazi, AU Raymond F.
- Center for AIDS Research, Laboratory of Biochemical Pharmacology, CC Department of Pediatrics, Emory University School of Medicine and Veterans Affairs Medical Center, Atlanta, GA, USA
- SO Antiviral Chemistry & Chemotherapy (2009), 20(2), 99-106 CODEN: ACCHEH; ISSN: 0956-3202
- URL: http://www.intmedpress.com/journals/avcc/abstract.cfm?id=1400&pid=108 International Medical Press, Ltd.
- Journal; (online computer file)
- LA English
- Background: 2'-C-Me and 4'-azido nucleosides have previously demonstrated

inhibition of hepatitis C virus (HCV) replication by targeting the RNA-dependent RNA polymerase NS5B. In an effort to discover new and more potent anti-HCV agents, we envisioned synthesizing nucleoside analogs by combining the 2'-C-methyl-moiety with the 4'-azido-moiety into one mol. Methods: 2'-C-methyl-4'-azido pyrimidine nucleosides were synthesized by first converting 2'-C-Me ribo-nucleosides to the corresponding 4'-exocyclic methylene nucleosides. Treatment with iodine azide, benzoylation of the 2'- and 3'-hydroxy groups, oxidative displacement of the 5 -iodo group with p-chloroperoxybenzoic acid, and debenzovlation gave the desired 2'-C-methyl-4'-azido uridine and thymidine analogs in good yield. Standard conversion of uridine to cytidine via the 4-triazole yielded 2'-C-methyl-4'-azido cytidine. In addition, 5'-phosphoramidate derivs. of 2'-C-methyl-4'-azido uridine and cytidine were synthesized to bypass the initial phosphorylation step. Results: The prepared nucleosides and their 5'-monophosphate prodrugs were evaluated for their ability to inhibit replication of the hepatitis C virus in a sub-genomic replicon cell based assay. Cytotoxicity in Huh7 cells was determined simultaneously with anti-HCV activity by extraction and amplification of both HCV RNA and rRNA. Among the newly synthesized compds., only the 5'-monophosphate nucleoside prodrugs had modest and selective anti-HCV activity. All prepared pyrimidine nucleosides and 5'-monophosphate nucleoside prodrugs displayed no evidence of cytotoxicity at high conces. Conclusions: This work is the first example of both inactive uridine and cytidine analogs of a nucleoside being converted to active anti-HCV nucleosides via 5'-monophosphate

IT 1206126-51-3P 1206126-54-6P

RL: ADV (Adverse effect, including toxicity); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(anti-hepatitis C virus activity of novel methylazido pyrimidine nucleoside phosphoramidate prodrugs)

RN 1206126-51-3 CAPLUS

CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1206126-54-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 3 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:952853 CAPLUS DN 151:313498
- Phosphoramidate Prodrugs of 2'-C-Methylcytidine for Therapy of Hepatitis C Virus Infection
- AU Gardelli, Cristina; Attenni, Barbara; Donghi, Monica; Meppen, Malte; Pacini, Barbara; Harper, Steven; Di Marco, Annalise; Fiore, Fabrizio;

Giuliano, Claudio; Pucci, Vincenzo; Laufer, Ralph; Gennari, Nadia; Marcucci, Isabella; Leone, Joseph F.; Olsen, David B.; MacCoss, Malcolm; Rowley, Michael; Narjes, Frank

Departments of Medicinal Chemistry and Pharmacology, Istituto di Ricerche di Biologia Molecolare, P. Angeletti S.p.A. (IRBM-MRL Rome), Pomezia,

American Chemical Society

LA English

CASREACT 151:313498

AB The application of a phosphoramidate prodrug approach to

2'-C-methylcytidine (NM107), the first nucleoside inhibitor of the hepatitis C virus (HCV) N55B polymerase, is reported.
2'-C-Methylcytidine, as its valyl ester prodrug (NM283), was efficacious

in reducing the viral load in patients infected with HCV. Several of the phosphoramidates prepared demonstrated a 10- to 200-fold superior potency with respect to the parent nucleoside in the cell-based replicon assay. This is due to higher levels of 2'-C-methylcytidine triphosphate in the cells. These prodrugs are efficiently activated and converted to the triphosphate in hepatocytes of several species. Our SAR studies ultimately led to compds. that gave high levels of NTP in hamster and rat

liver after s.c. dosing and that were devoid of the toxic phenol moiety usually found in ProTides. 946511-07-5P 946511-13-3 946511-29-1P

946511-13-3P 946511-32-6P 946511-37-1P

946511-45-1P 946511-46-2P 946511-59-7P 946511-63-3P 946511-68-8P 946511-72-4P 946511-74-6P

946511-76-8P 946511-78-0P 946511-81-5P 946511-82-6P 1035638-04-0P 1035638-21-1P

1185923-61-8P 1185923-63-0P 1185923-73-2P 1185923-76-5P 1185923-79-8P

1185923-83-4P 1185923-88-9P 1185923-92-5P 1185923-94-7P 1185923-96-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and antihepatitis activity of methylcytidine phosphoramidate prodrugs via condensation of methylcytidine with aryloxyphosphorochloridates)

946511-07-5 CAPLUS

L-Alanine, N-(2'-C-methyl-P-1-naphthalenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-13-3 CAPLUS

L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

RN 946511-29-1 CAPLUS

L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX CN

Absolute stereochemistry.

RN 946511-32-6 CAPLUS

L-Alanine, N-[2'-C-methyl-P-[4-(trifluoromethyl)phenyl]-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

946511-37-1 CAPLUS L-Alanine, N-[P-(4-methoxyphenyl)-2'-C-methyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-45-1 CAPLUS RN

L-Alanine, N-[P-(2-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, butyl ester

(CA INDEX NAME)

Absolute stereochemistry.

946511-46-2 CAPLUS L-Alanine, N-[P-(4-chloro-1-naphthalenyl)-2'-C-methyl-5'-cytidylyl]-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

CN

946511-59-7 CAPLUS L-Alanine, N-[2'-C-methyl-P-(2-methylphenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-63-3 CAPLUS

L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 1-methylethyl ester (CA INDEX NAME)

RN 946511-68-8 CAPLUS

L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, propyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-72-4 CAPLUS RN

L-Leucine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-74-6 CAPLUS L-Norleucine, N-(P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-76-8 CAPLUS Glycine, N-(P-(4-chloropheny1)-2'-C-methyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

RN

946511-78-0 CAPLUS
Cytidine, 2'-C-methyl-, 5'-[4-chlorophenyl
N-[(18)-2-ethoxy-2-oxo-1-phenylethyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

946511-81-5 CAPLUS L-Tryptophan, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME) RN CN

Absolute stereochemistry.

946511-82-6 CAPLUS RN

L-Alanine, N-[P-[2-(methoxycarbonyl)phenyl]-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

1035638-04-0 CAPLUS L-Alanine, $N-[\Gamma(RR)]-P-(4-chlorophenyl)-2$ -C-methyl-5 -cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1035638-21-1 CAPLUS L-Alanine, N-[[P(S)]-P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1185923-61-8 CAPLUS

D-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1185923-63-0 CAPLUS L-Phenylalanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

RN

1185923-73-2 CAPLUS L-Alanine, N-(2'-C-methyl-P-1-naphthalenyl-5'-cytidylyl)-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

1185923-76-5 CAPLUS L-Alanine, N-[F-(4-ohloro-5-methyl-2-(1-methylethyl)phenyl]-2'-C-methyl-5'-cytidyly]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

1185923-79-8 CAPLUS L-Alanine, N-[2'-C-methyl-P-[2-(2,2,2-trichloroethyl)phenyl]-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

RN

1185923-81-2 CAPLUS L-Tyrosine, O-[P-deoxy-P-[[(1S)-2-ethoxy-1-methy1-2-oxoethy1]amino]-2'-Cmethyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1185923-83-4 CAPLUS L-Alanine, N-[P-[1-[(1,1-dimethylethoxy)carbonyl]-1H-indol-5-yl]-2'-C-methyl-5'-cytidylyl-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1185923-88-9 CAPLUS L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 3-methoxypropyl ester (CA INDEX NAME)

Absolute stereochemistry.

1185923-90-3 CAPLUS L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 1-ethylbutyl ester (CA INDEX NAME)

10/560 883

RN 1185923-92-5 CAPLUS

N L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, heptyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1185923-94-7 CAPLUS

CN L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, cycloheptyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1185923-96-9 CAPLUS

N L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 1-propylpentyl ester (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 4 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:875224 CAPLUS
- DN 151:381628
- TI Cyclic phosphoramidates as prodrugs of 2'-C-methylcytidine
- U Moppen, Malte; Pacini, Barhara; Bazzo, Renzo; Koch, Uwe; Leone, Joseph F.; Koeplinger, Kenneth A.; Rowley, Michael; Altamura, Sergio; Di Marco, Annalise; Fiore, Fabrizio; Giuliano, Claudio; Gonzalez-Paz, Odalye; Laufer, Rajbp; Pucol, Vincenzo; Narjee, Frank; Gardelli, Cristina
- CS Department of Chemistry Istituto di Ricerche di Biologia Molecolare, P.
- Angeletti S.p.A., Pomezia, 00040, Italy SO European Journal of Medicinal Chemistry (2009), 44(9), 3765-3770
- CODEN: EJMCA5; ISSN: 0223-5234 PB Elsevier Masson SAS
- DT Journal
- LA English
- AB The currently approved treatment for hepatitis C virus infections is a combination of Ribavirin and pegylated Interferon. It leads to a

sustained virol. response in approx. only half of the patients treated. For this reason there is an urgent need of new therapeutic agents. 2'-C-Methylcytidine is the first nucleoside inhibitor of the HCV NS5B polymerase that was efficacious in reducing the viral load in patients infected with HCV. The application of a monophosphate prodrug approach based on unprecedented cyclic phosphoramidates is reported. The SAR studies led to compds. that are efficiently converted to the active triphosphate in human hepatocytes.

1035638-04-0P 1035638-21-1P RL: PUR (Purification or recovery); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(asym. synthesis and antiviral activity of methylcytidine cyclic

phosphoramidates as prodrugs via coupling of phosphoramidate chlorides with methylcytidine, and intramol. cyclization of phosphoramidates)

1035638-04-0 CAPLUS L-Alanine, N-[[P(R)]-P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1035638-21-1 CAPLUS L-Alanine, N-[[0:S]]-P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

OSC.G THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 27 ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 5 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:845570 CAPLUS
- DN
- The application of phosphoramidate ProTide technology to the potent anti-HCV compound 4'-azidocytidine (R1479)
- McGigan, Christopher; Kelleher, Mary Rose; Perrone, Plinio; Mulready, Sinead; Juoni, Giovanna; Daverio, Felice; Rajyaguu, Sonal; Le Pogan, Sophie; Najera, Isaael; Martin, Joseph A.; Klumpy, Klaus; Smith, David B. Welsh School of Pharmacy, Cardiff University, Cardiff, CF10 NNB, UR Bloorganic & Medicinal Chemistry Letters (2009), 1915.) 4250-4254 AU
- CS 90 CODEN: BMCLES; ISSN: 0960-894X
- Elsevier B.V.
- LA
- CASREACT 151:328021

AB The design, synthesis and evaluation of a family of ca. 50 phosphoramidate ProTides of the potent anti-ReV (hepatitis C virus) compound 4'-azidocytidine (Ri479), with variation on the ester, amino acid and aryl moiety of the ProTide, are reported. Sub-micromolar inhibitors of HCV emerge. The compds. are all non-cytotoxic in the replicon assay. Herein are reported detailed SARs for each of the reqions of the ProTide.

926308-35-2P 926308-39-6P 926308-40-9P 926308-42-1P 926308-49-8P 926308-56-7P 926308-59-0P 926308-61-4P 926308-58-9P 926308-79-4P 926308-88-5P 926308-91-0P 926308-95-4P 926308-98-7P 926309-01-5P 926309-03-7P 926309-05-9P 926309-24-2P 926309-18-4P 926309-22-0P 926309-29-7P 926309-45-7P 926309-46-8P 926309-64-0P 926309-67-3P 926309-76-4P 926309-85-5P 1186412-19-0P 1186412-22-5P 1186412-23-6P 1186412-24-7P 186412-25-8P 1186412-26-9P 1186412-28-1P 1186412-29-2P 1186412-30-5P 1186412-32-7P 1186412-33-8P 1186412-31-6P 1186412-34-9P 186412-35-0P 1186412-37-2P 1186412-38-3P 1186412-39-4P 1186412-40-7P 1186412-42-9P 1186412-41-8P 1186412-43-0P RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic

RI: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(application of phosphoramidate Profide technol. to the potent anti-hepatitis C virus compound 4'-azidocytidine (R1479) to produce new antiviral agents) N 92430-3-3-2 CAPUS

CN L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-39-6 CAPLUS
CN L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-40-9 CAPLUS
CN L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester
(CA INDEX NAME)

RN 926308-42-1 CAPLUS CN Cytidine, 4 -C-azido-, 5 -[phenyl N-[1,1-dimethyl-2-oxo-2-(phenylmethoxy)ethyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-49-8 CAPLUS
CN Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-2-methyl-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-56-7 CAPLUS
CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1-methylpropyl ester
(CA INDEX NAME)

Absolute stereochemistry.

RN 926308-58-9 CAPLUS
CN D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

RN 926308-59-0 CAPLUS

No. L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-61-4 CAPLUS CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-67-0 CAPLUS CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-79-4 CAPLUS
CN Cytidine, 4'-C-azido-, 5'-[phenyl N-[1(ethoxycarbonyl)gyclopentyl]phosphoramidate] (CA INDEX NAME)

RN 926308-88-5 CAPLUS CN L-Leucine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-91-0 CAPLUS CN L-Leugine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-95-4 CAPLUS CN L-Leucine, N-(4 -C-azido-P-phenyl-5 -cytidylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-98-7 CAPLUS
CN L-Valine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester (CA INDEX NAME)

RN 926309-01-5 CAPLUS CN L-Isoleucine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-03-7 CAPLUS CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-05-9 CAPLUS
CN D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-18-4 CAPLUS CN D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, dodecyl ester (CA INDEX NAME)

RN 926309-22-0 CAPLUS CN L-Methionine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-24-2 CAPLUS CN L-Girtamic acid, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1,5-diethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-29-7 CAPLUS
CN L-Leucine, N-[4'-C-azido-P-(4-chlorophenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-35-5 CRPLUS
CN L-Leucine, N-[4'-C-azido-P-(3,4-dichlorophenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

926309-42-4 CAPLUS L-Leucine, N-[4'-C-azido-P-(4-methylphenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

926309-45-7 CAPLUS L-Leucine, N-[4'-C-azido-P-(4-methoxyphenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RN
- 926309-46-8 CAPLUS L-Alanine, N-[4'-C-azido-P-(4-methoxyphenyl)-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

- 926309-64-0 CAPLUS RN
- L-Aspartic acid, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1,4-diethyl ester CN (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-67-3 CAPLUS

320303-0/-3 CAPBUS D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-76-4 CAPLUS

D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-85-5 CAPLUS L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1-methylethyl ester (CA HDEX NAME)

Absolute stereochemistry.

1186412-19-0 CAPLUS

Glycine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester (CA INDEX NAME)

RN 1186412-22-5 CAPLUS CN Glycine, N-[[P(R)]-4'-C-azido-P-phenyl-5'-cytidylyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1186412-23-6 CAPLUS Glycine, N-[[P(S)]-6'-C-azido-P-phenyl-5'-cytidylyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1186412-24-7 CAPLUS CN L-Alanine, N-(4 -C-azido-P-phenyl-5 -cytidylyl)-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1186412-25-8 CAPLUS
CN L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 1186412-26-9 CAPLUS

CN 1-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1186412-28-1 CAPLUS CN L-Alanine, N-[4'-G-azido-P-(2-chlorophenyl)-5'-cytidylyl]-, phenylmethyl ester (GA INDEX NAME)

Absolute stereochemistry.

RN 1186412-29-2 CAPLUS
CN L-Alanine, N-[4'-C-azido-P-(3-chlorophenyl)-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1186412-30-5 CAPLUS
CN L-Alanine, N-[4'-C-azido-P-(4-chlorophenyl)-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

1186412-31-6 CAPLUS L-Alanine, N-[4'-C-azido-P-(2-methoxypheny1)-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

1186412-32-7 CAPLUS L-Alanine, N-[4'-C-azido-P-(3-methoxyphenyl)-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RN
- 1186412-33-8 CAPLUS L-Alanine, N=(4+C-azido-P-(2-methylphenyl)-5+cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

- RN
- 1186412-34-9 CAPLUS L-Alanine, N-[4'-C-azido-P-(4-methylphenyl)-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

RN 1186412-35-0 CAPLUS CN L-Alanine, N-[4"-C-azido-P-(4-bromophenyl)-5"-cytidylyl]-, phenylmethyl ester (GA INDEX NAME)

Absolute stereochemistry.

RN 1186412-37-2 CAPLUS CN L-Alanine, N-[4 -C-azido-P-(3,4-dichlorophenyl)-5 -cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1186412-38-3 CAPLUS CN L-Alanine, N-[4'-C-azido-P-(4-methylphenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

1186412-39-4 CAPLUS L-Alanine, N-[4'-C-azido-P-(2,6-dimethoxyphenyl)-5'-cytidylyl]-, ethyl ester (GA INDEX NAME)

Absolute stereochemistry.

1186412-40-7 CAPLUS L-Alanine, N-[[P(R)]-4'-C-azido-P-1-naphthalenyl-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1186412-41-8 CAPLUS L-Alanine, N-[[P(S)]-4'-C-azido-P-1-naphthalenyl-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1186412-42-9 CAPLUS

L-Alanine, N=[[P(R)]-4'-C-azido-P-2-naphthalenyl-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

1186412-43-0 CAPLUS L-Alanine, N-[[P(S)]-4'-C-azido-P-2-naphthalenyl-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 22 ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 6 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2009:296890 CAPLUS
- 150:322627
- Method of treating cancer by administration of 5-substituted nucleosides
- Fahrig, Rudolf; Heinrich, Joerg-Christian
- PA Resprotect, GmbH, Germany U.S. Pat. Appl. Publ., 35pp.
- SO CODEN: USXXCO
- English
- FAN.CNT 1

	PATENT NO.		KIND	DATE	APPLICATION NO.	DATE	
PI	US	20090068286	A1	20090312	US 2007-853540	20070911	
	CA	2601558	A1	20090311	CA 2007-2601558	20070911	
PRAI	US	2007-853540	TO	20070911			

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- The invention relates to methods of administration of at least one overexpression inhibitor of DNA repair genes and/or oncogenes (e.g., (E)-5-(2-bromoviny1)-2'-deoxyuridine (BVDU), or a prodrug, or salt thereof) to increase the cytotoxic effect of a cytostatic or cytotoxic chemotherapeutic agent during and/or after chemotherapy, e.g., in the treatment of cancer. 232925-18-7
- RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(method of treating cancer by administration of 5-substituted

nucleosides) 232925-18-7 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

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ANSWER 7 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 2008:1215396 CAPLUS
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AN

DN TI 149:426212

PA

1891404212
Preparation of nucleoside phosphoramidate prodrugs as antiviral agents Sofia, Michael J.; Da, Jinfa; Wang, Peiyuan; Nagarathnam, Dhanapalan Pharmasser, Inc., USA
PUT Int. Appl., 751 pp., Chemical Indexing Equivalent to 152:144974 (US)
CUDEN: PIXEA. so

	En	ent glish 2																
	PATENT NO.						DATE			APPLICATION NO.								
PI										WO 2008-US58183								
		W:	AE,	AG,	AL,	AM,	AO,	AT,	AU,	AZ,	BA,	BB,	BG,	BH,	BR,	BW,	BY,	BZ,
			CA,	CH,	CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DO,	DZ,	EC,	EE,	EG,	ES,
								GM,										
								KZ,										
								MX,										
								SC,								SY,	TJ,	TM,
								UG,										
		RW:						CZ,										
								LV,										
								CI,										
								LS,				SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,
								MD,										
	AU 2008232827 CA 2682230 KR 2010016041 MX 2009010401							US 2008-53015					20080326					
						20081009 AU 2008-232827												
				A1								2230 20080326						
				A		20091110			MX 2009-10401				20090928					
PRAI	US 2007-982309P				P		2007	0330										
								2008										
		2008				W		2008	0326									
OS GI	MAI	RPAT	149:	4262	12													

AB. Disclosed herein are nucleoside phosphoramidates prodrugs I, wherein R and R3 are independently H, alkyl, cycloalkyl, alkylamine, hydroxyalkyl, CH2SH, alkyl-sulfonyl, (CH2) SNHC(=NH)NH2, (IH-indol-3-yl)methyl, (IH-indol-3-yl)methyl, alkyl, aryl, aryl-alkyl; R3 and R both are alkyl; R3 and R together are alkylidene so as to form a spiro ring; R3 is H and R and R2 together are (CH2)n so as to form a cyclic ring that includes the adjoining N and C atoms; R is H and R3 and R2 together are (CH2)n. so as to form a cyclic ring; that includes the adjoining N and C atoms, n is 2 to 4; one of R and R3 is H and the other is R3 CH3, Et, CH(CH3)2, CH2CH(CH3)2, CH(CH3)CH2CH3, CH2Ph, CH2-indol-3-yl, -CH2CH2SCH3, CH2CO2H, CH2C(0)NH2, CH2CH2COOH, CH2CH2C(0)NH2, CH2CH2CH2CH2NH2, -CH2CH2CH2NHC(NH)NH2, CH2-imidazol-4-yl, CH2OH, CH(OH)CH3, CH2((4'-OH)-Ph), CH2SH, cycloalkyl, Rl is H, alkyl, cycloalkyl, aryl; R2 is H, alkyl; R, R2 and R3 together are (CH2)n; R4 is H, alkyl, alkoxy, alkylamino, halo, halo-alkyl, cycloalkyl, aminoacyl, aryl, heterocycle; R5 anylamino, halo, halo-ankyl, cycloalxyl, amindadyl, afyl, meterocycle, Adia H, akyl, CROH, CHZP, CHZP, CHZCN, CHZNHZ, CHZNHZ, CHZNHWE, Alkyne; R6 is H, Me, CHZP, CHZP, CF3, F, CN, X is H, OH, F, OMe, halogen, NHZ, N3; Y is OH, H, alkyl, alkenyl, alkynyl, vinyl, N3, CK, halo, oxycarbonyl sulfonyl, were prepared and tested as antiviral Thus, nucleoside II was prepared and tested as antiviral agent for the treatment of any condition the result of an infection by hepatitis C virus, West Nile virus, yellow fever virus, dengue virus, rhinovirus, polio virus, hepatitis A virus, bovine viral diarrhea virus or Japanese encephalitis virus.

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1015255-46-5P
                1064684-23-6P
                                 1064684-24-7P
1064684-25-8P
                1064684-28-1P
                                 1064684-29-2P
                1064684-32-7P
1064684-36-1P
                1064684-37-2P
                                 1064684-38-3P
1064684-41-8P
                1064684-42-9P
                                 1064684-43-0P
1064684-44-1P
                1064684-45-2P
                                 1064684-46-3P
                                 1064684-49-6P
1064684-50-9P
                1064684-52-1P
                                 1064684-53-2P
                                 1064684-56-5P
1064684-54-3P
                1064684-55-4P
                1064684-58-7P
1064684-57-6P
                                 1064684-59-8P
                                 1064684-62-3P
1064684-60-1P
                1064684-61-2P
1064684-63-4P
                                 1064684-66-7P
                1064684-68-9P
                                 1064684-69-0P
1064684-70-3P
                1064684-71-4P
                                 1064694-72-50
1064684-73-6P
                1064684-74-7P
                                 1064684-75-80
1064684-76-9P
                1064684-77-0P
                                 1064684-78-1P
1064684-79-2P
                1064684-80-5P
                                 1064684-81-6P
1064694-92-70
                1064694-95-00
                                 1064694-99-30
1064684-92-9P
                1064685-44-4P
                                 1064685-46-6P
```

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of nucleoside phosphoramidate prodrugs as antiviral agents) 1015255-66-5 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,

methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-23-6 CAPLUS

L-Valine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

 $\label{local-equation} $$1064684-24-7$$ CAPLUS$$ L-Valine, N-(2'R)-P-(4-bromopheny1)-2'-deoxy-2'-fluoro-2'-methy1-5'-uridy191,-, methy1 ester (CA INDEX NAME)$

Absolute stereochemistry.

1064684-25-8 CAPLUS L-Alanine, N-[(2'R)-P-(4-bromophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-28-1 CAPLUS

L-Valine, N-[(2'R)-P-(4-bromopheny1)-2'-deoxy-2'-fluoro-2'-methy1-5'-

cytidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-29-2 CAPLUS
CN L-Vallne, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-cytidylyl]-,
methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-30-5 CAPLUS
CN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-32-7 CAPLUS Glycine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-33-8 CAPLUS
CN L-Alamine, N-[(2'R)-2'-deoxy-P-(2,4-dichlorophenyl)-2'-fluoro-2'-methyl-5'uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-36-1 CAPLUS L-Alanine, N-((2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, butyl oster (CA INDEX NAME)

Absolute stereochemistry.

1064684-37-2 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-38-3 CAPLUS

Independent CARDOO CARD

Absolute stereochemistry.

1064684-41-8 CAPLUS L-Alanine, N-[(2*R)-P-(4-chlorophenyl)-2*-deoxy-2*-fluoro-2*-methyl-5*uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-42-9 CAPLUS L-Alanine, N= $((2^nR)-2^n-deoxy-P-(3,4-dichloropheny1)-2^n-fluoro-2^n-methy1-5^n-uridy1y1)-1, methy1 ester (CA INDEX NAME)$ CN

Absolute stereochemistry.

1064684-43-0 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
1-methylpropyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

1064684-44-1 CAPLUS L-Alanine, N-((2'R)'-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-45-2 CAPLUS RN

L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-methoxyphenyl)-2'-methyl-5'-

uridylyl]-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-46-3 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-fluorophenyl)-2'-methyl-5'-uridylyl-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-47-4 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-fluoro-phenyl)-2'-methyl-5'-uridylyl]-1 l-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-48-5 CAPLUS

L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-fluoropheny1)-2'-methy1-5'-uridy1y1]-, phenylmethy1 ester (CA INDEX NAME)

1064684-49-6 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-methoxyphenyl)-2'-methyl-5'-CN uridylyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-50-9 CAPLUS L-Alanine, N-[(2/R]-P-(2-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-urid/yl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

 $\label{eq:continuous} \begin{array}{lll} 1064684-52-1 & \text{CAPLUS} \\ \text{L-Alanine, N-[(2^!R)-2^!-deoxy-P-(2,4-dichlorophenyl)-2^!-fluoro-2^!-methyl-5^!-} \end{array}$ uridylyl]-, butyl ester (CA INDEX NAME)

1064684-53-2 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-(4-methylphenyl)-5'uridylyl]-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-54-3 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-fluorophenyl)-2'-methyl-5'uridylyl)-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-55-4 CAPLUS L-Alanine, N-[(2/R)-2'-deoxy-P-(3,4-dichloropheny1)-2'-fluoro-2'-methyl-5'-uridylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-56-5 CAPLUS

L-Alanine, N-[(2'R)-P-(2-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'uridylyl]-, 1-methylethyl ester (CA INDEX NAME)

1064684-57-6 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-P-(4-methoxyphenyl)-2'-methyl-5'uridylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-58-7 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, pentyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-59-8 CAPLUS L-Alanthe, N-[[P(R],2'R]-P-(4-chloropheny1)-2'-deoxy-2'-fluoro-2'-methy1-5'-uridy2y1]-, 1-methylethy1 ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-60-1 CAPLUS

L-Alanine, N-[(2'R)-P-(4-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-

uridylyl]-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-61-2 CAPLUS
CN L-Alamine, N-[(2'R)-P-(4-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'uridylyl-, ethyl-ster (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-62-3 CAPLUS
CN L-Alamine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-(4-methylphenyl)-5'uridylyl-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-63-4 CAPLUS
CN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-(4-methylphenyl)-5'uridylyl]-, phenjmethyl ester (CA INDEX NAME)

CN

RN 1064684-64-5 CAPLUS

Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, 5'-[phenyl N-[(1S)-1-(methoxycarbonyl)propyl]phosphoramidate], (2'R)- (CA INDEX

Absolute stereochemistry.

1064684-66-7 CAPLUS L-Alamine, N-((2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, (4-fluorophenyl)methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-67-8 CAPLUS L-Alanine, N-((2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, 3-methylbyl ester (CA INDEX NAME)

Absolute stereochemistry.

 $\label{eq:local_problem} 1064684-68-9 \quad CAPLUS \\ \text{L-Alanine, N-[(2^1R)-2^1-deoxy-P-(3,4-dichlorophenyl)-2^1-fluoro-2^1-methyl-5^1-deoxy-P-(3,4-dichlorophenyl)-2^1-fluoro-2^1-deoxy-P-(3,4-dichlorophenyl)-2^1-fluoro-2^1-deoxy-P-(3,4-dichlorophenyl)-2^1-fluoro-2^1-deoxy-P-(3,4-dichlorophenyl)-2^1-fluoro-2^1-fluoro-2^1-fluoro-2^1-fluoro-2^1-fluoro-2^1-fluoro-2^1-fluoro-2^1-fluoro-2^1-fluoro-2^1$ uridylyl]-, phenylmethyl ester (CA INDEX NAME)

1064684-69-0 CAPLUS L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, cyclohexyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-70-3 CAPLUS
D-Alanine, N-((2'R))-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
butyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

1064684-71-4 CAPLUS

D-Alanine, N=[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-72-5 CAPLUS
D-Alanine, N-((2'R)'-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
phenylmethyl ester (CA INDEX NAME)

RN

1064684-73-6 CAPLUS L-Alanine, N-[(2'R)-P-(2-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl|-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-74-7 CAPLUS L-Alanine, N-[(2'R)-P-(4-bromophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl,-1-methyl-thyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-75-8 CAPLUS L-Alanine, N-{(2'R)-2'-deoxy-2'-fluoro-P-(4-fluorophenyl)-2'-methyl-5'-uridylyl],- cyclohexyl ester (CA INDEX NAME)

10/560.887

RN 1064684-76-9 CAPLUS

N L-Alanine, N-[(2'R)-P-(4-bromophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'uridylyl]-, cyclohexyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-77-0 CAPLUS

Toletos-//- CARDOS-/- Cluoro-2'-methyl-, 5'-[phenyl N-(18)-1-[(1-methylethoxy)carbonyl]propyl]phosphoramidate], (2'R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-78-1 CAPLUS

CN Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, 5'-[phenyl N-{(15)-1-(cyclohexyloxy)carbonyl]propyl]phosphoramidate], (2'R)- (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-79-2 CAPLUS

CN Uridine, 2'-deoxy-2-fluoro-2'-methyl-, 5'-[4-fluorophenyl N-[(18)=1-[(cyclohexyloxy)carbonyl]propyl]phosphoramidate], (2'R)~ (CA INDEX NAME)

RN 1064684-80-5 CAPLUS
CN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
2-fluoroethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-81-6 CAPLUS CN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, 2,2-difuorocthyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-82-7 CAPLUS
CN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
2,2,2-drifitoro-1-(trifitoromethyl)ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 1064684-85-0 CAPLUS
CN L-Alanine, N-[(2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
2-fluoro-1-(fluoromethyl)ethyl ester (CA INDEX NAME)

RN

1064684-88-3 CAPLUS L-Alaine, N-[(2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl)-, cyclopropylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064684-92-9 CAPLUS

Uridine, 2'-deoxy-2'-fluoro-2'-methyl-, 5'-[phenyl N-[(1S)-1-[(cyclopentyloxy)carbonyl]propyl]phosphoramidate], (2'R)- (CA INDEX NAME)

Absolute stereochemistry.

1064685-44-4 CAPLUS

Glycine, N=[[P(S),2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

1064685-46-6 CAPLUS

L-Alanine, N-[[P(8),2'R]-P-(4-chlorophenyl)-2'-deoxy-2'-fluoro-2'-methyl-5'-uridylyl]-, 1-methylethyl ester (CA INDEX NAME)

- 1064685-47-7 CAPLUS L-Alanine, N-[[P(S),2'R]-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'uridylyl]-, cyclohexyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (preparation of nucleoside phosphoramidate prodrugs as antiviral agents) 1064684-27-0 CAPLUS
- L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

- H2N
- ANSWER 8 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2008:805636 CAPLUS AN
- DN 149:119579
- Nucleoside cyclic phosphoramidates for the treatment of RNA-dependent RNA viral infections
- Meppen, Malte; Narjes, Frank; Pacini, Barbara; Gardelli, Cristina; IN Durette, Philippe L.
- Merck & C., Inc., USA; Istituto di Ricerche di Biologia Molecolare P. Angeletti S.p.A. PDI Int. Appl., 55pp. PA
- SO CODEN: PIXXD2
- Patent
- LA
- English FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008079206	A1	20080703	WO 2007-US25637	20071214
	W: AE, AG,	AL. AM. AT	. AU. AZ.	BA. BB. BG. BH. BR. BW.	BY. BZ. CA.

```
CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI,
             GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG,
             KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,
             MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,
             PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
             TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
        RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT,
                         LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
             BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
             GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
             BY, KG, KZ, MD, RU,
     AU 2007338899
                                            AU 2007-338899
                                                                    20071214
     CA 2672613
                                            CA 2007-2672613
                          A1.
        R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LI, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR
                                            US 2009-519038
                          A1
PRAI US 2006-876034P
     WO 2007-US25637
```

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS MARPAT 149:119579

AB The invention discloses nucleoside cyclic phosphoramidates I, II (R1= H, Me, fluoromethyl; R2= F, OR3; R3= H, Me, C1-16 alkylcarbonyl, etc.; R4= H, C1-5 alkyl, Ph,etc; R5- H, Me; R6- H, C1-16 alkyl, Ph, adamantyl, etc.; R9= H, C1-8 alkylcarbonyl, C1-8 alkyloxycarbonyl, etc.; R10= H, C1-8 alkyl, C1-8 alkylcarbonyl), precursors to inhibitors of RNA-dependent RNA viral polymerase. The compds. are precursors to inhibitors of RNA-dependent RNA viral replication and are useful for treating RNA-dependent RNA viral infections. They are particularly useful as precursers to inhibitors of hepatitis C virus (HCV) NS5B polymerase and precursors to inhibitors of HCV replication and/or are useful for the treatment of hepatitis C infection. The invention also describes pharmaceutical compns. containing such nucleoside cyclic phosphoramidates alone or in combination with other agents active against RNA-dependent RNA viral infections, in particular HCV infection. Also disclosed are methods for inhibiting RNA-dependent RNA polymerase, inhibiting RNA-dependent RNA viral replication, and/or treating RNA-dependent RNA viral infection with nucleoside cyclic phosphoramidates of the invention. 1035638-03-9P 1035638-05-1P

1035638-18-6P 1035638-22-2P 1035638-24-4P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(nucleoside cyclic phosphoramidates for treatment of hepatitis C and other RNA-dependent RNA viral infections) 1035638-03-9 CAPLUS

1035638-03-9 CAPLUS
L-Alanine, N-[[P(R)]-P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, butyl ester, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CN

10/560,887

CRN 1035638-02-8 CMF C23 H32 C1 N4 O9 P

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 O2

1035638-05-1 CAPLUS L-Alanine, N-[[P(R]]-P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethylester, 2,2,2-rrifluoroacetate (1:?) (CA INDEX NAME) RN

CM 1

CRN 1035638-04-0 CMF C21 H28 C1 N4 O9 P

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

-co2H

1035638-12-0 CAPLUS

McIntosh

L-Alanine, N-[[P(S)]-P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, heptyl ester, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM

CRN 1035638-11-9 CMF C26 H38 CL N4 O9 P

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 O2

RN

1035638-18-6 CAPLUS L-Alanine, N=[[P(S)]=P-(4-chlorophenyl)=2-C-methyl=5-cytidylyl]=, butylester, 2,2-crtfluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1035638-17-5 CMF C23 H32 Cl N4 O9 P

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 02

RN

 $\label{eq:continuous} \begin{array}{lll} 1035638-22-2 & CAPLUS \\ L-Alanine, & M-[[P(S)]-P-(4-chlorophenyl)-2^*-C-methyl-5^*-cytidylyl]-, & ethyleater, 2,2,2-trifluoroacetate (117) & (CA_INDEX_NAME) \\ \end{array}$

CM

CRN 1035638-21-1 CMF C21 H28 Cl N4 09 P

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 O2

RN

ester, 2,2,2-trifluoroacetate (1:?) (CA INDEX NAME)

CM 1

CRN 1035638-23-3 CMF C26 H38 C1 N4 O9 P

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 02

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNI 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 9 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2008:130979 CAPLUS
- DN 148:393762
- TI The mechanism of action of β-D-2'-deoxy-2'-fluoro-2'-C-methylcytidine involves a second metabolic pathway leading to β-D-2'-deoxy-2'-fluoro-2'-C-methyluridine 5'-triphosphate, a potent
 - inhibitor of the hepatitis C virus RNA-dependent RNA polymerase Murakami, Eisuke, Niu, Congrong Bao, Haitying, Steuer, Holly M. Micolochick; Whitaker, Tony; Nachman, Tammy; Sofia, Michael A.; Wang, Pelyuan; Otto, Michael J.; Furman, Philip A.
- CS Pharmasset, Inc., Princeton, NJ, 08540, USA
- SO Antimicrobial Agents and Chemotherapy (2008), 52(2), 458-464
- CODEN: AMACCQ; ISSN: 0066-4804
 PB American Society for Microbiology
- DT Journal

AU

- LA English
- AB P-D-2'-Deoxy-2'-fluoro-2'-C-methylcytidine (PSI-6130) is a potent finibitor of hepatitis C virus (RUV) RNA replication in an HCV replicon assay. The 5'-triphosphate of PSI-6130 is a competitive inhibitor of the HCV RNA-dependent RNA polymerase (RRR) and acts as a nonobligate change of the HCV RNA-dependent RNA polymerase (RRR) and acts as a nonobligate change results in the formation of the 5'-triphosphate of the utidine congener, Ps-D-2'-deoxy-2'-fluoro-2'-C-methyluridine (PSI-6206, ROC433). Here we show that the formation of the 5'-triphosphate of ROC433 (ROC433-TP) requires the desmination of PSI-6130 monophosphate and that ROC433 in the requirement of the state of the ROC433 (ROC433-TP) and the repulse of the ROC433 (ROC433-TP) and the repulse of the ROC433 (ROC433-TP) and the repulse of the ROC433 (ROC433-TP) and the ROC433-TP is a potent inhibitor of the ROC4 RdRp however,

both enzymic and cell-based assays show that PSI-6130 triphosphate is a

IT 1015255-46-5P, PSI 7672 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Blological study); PREP (Preparation); USES

more potent inhibitor of the HCV RdRp than RO2433-TP.

- (prodrug PSI-6130 metabolism yields two potent inhibitors of hepatitis C virus RNA-dependent RNA polymerase)
- RN 1015255-46-5 CAPLUS
 CN L-Alanine, N-[(2'R)-2'-deoxy-2'-fluoro-2'-methyl-P-phenyl-5'-uridylyl]-,
 methyl ester (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD (9 CITINGS)
RE.CNT 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

- 1.4 ANSWER 10 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2008:40834 CAPLUS
- 149:258613
- Synthesis and Biological Evaluation of LNA Phosphoramidates
 Jensen, Jacob; Sjogren, Gitte; Hansen, Jens Bo; Rosenbohm, Christoph; AU Koch, Troels
- CS
- Santaris Pharma A/S, Hoersholm, Den. Nucleosides, Nucleotides & Nucleic Acids (2008), 27(1), 37-42 CODEN: NNNAFY: ISSN: 1525-7770
- Taylor & Francis, Inc.
- T.A English
- CASREACT 149:258613
- The synthesis of LNA (locked nucleic acid) phosphoramidates is presented. The LNA phosphoramidates were evaluated for their ability to inhibit cell
 - proliferation of the human prostate cancer cell line 15PC3. A number of the LNA phosphoramidates showed cell proliferation inhibition determined by the MTS
- 936616-55-6P 936616-56-7P 936616-57-8P
 - 936616-58-9P 936616-59-0P 936616-60-3P RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP
 - (Preparation); USES (Uses) (synthesis and biol. evaluation of locked nucleic acid (LNA)
- phosphoramidates as antitumor agents) 936616-55-6 CAPLUS
- L-Alanine, N-(hydroxyphenoxyphosphinyl)-, methyl ester, 4'-ester with 1-[2,5-anhydro-4-C-(hydroxymethyl)-α-L-1yxofuranosyl]-5-methyl-2,4(1H,3H)-pyrimidinedione (CA INDEX NAME)

Absolute stereochemistry.

- 936616-56-7 CAPLUS
- L-Alanine, N-(hydroxyphenoxyphosphinyl)-, phenylmethyl ester, 4'-ester with $1-[2,5-anhydro-4-C-(hydroxymethyl)-\alpha-L-lyxofuranosyl]-5-methyl-$ 2,4(1H,3H)-pyrimidinedione (CA INDEX NAME)

107560 883

RN 936616-57-8 CAPLUS

CN l-Alanine, N-[(4-chlorophenoxy)hydroxyphosphinyl]-, methyl ester, 4'-ester with 1-[2,5-anhydro-4-C-(hydroxymethyl)---l-yxofuranosyl]-5-methyl-2,4(18,3H)-pyrimidinedione (CA INDEX NAME)

Absolute stereochemistry.

RN 936616-58-9 CAPLUS

CN 1-Alanine, N-(hydroxyphenoxyphosphinyl)-, methyl ester, 4'-ester with 1-(2,5-anhydro-4-C-(hydroxymethyl)-B-D-lyxofuranosyl)-5-methyl-2,4(1H,3H)-pyrimidinedione (CA INDEX NAME)

Absolute stereochemistry.

RN 936616-59-0 CAPLUS

CN L-Alanine, N-(hydroxyphenoxyphosphinyl)-, phenylmethyl ester, 4'-ester with 1=[2,5-anhydro-4-C-(hydroxymethyl)-, bD-lyxofuranosyl]-5-methyl-2,4(18,3H)-pyrimidihedione (CA INDEX NAME)

936616-60-3 CAPLUS

L-Alanine, N-[(4-chlorophenoxy)hydroxyphosphinyl]-, methyl ester, 4'-ester with 1-[2,5-anhydro-4-C-(hydroxymethy1)-\(\beta\)-1yxofuranosyl]-5-methyl-2,4(1H,3H)-pyrimidinedione (CA INDEX NAME)

Absolute stereochemistry.

THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 13 ALL CITATIONS AVAILABLE IN THE RE FORMAT

1.4 ANSWER 11 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2007:1224266 CAPLUS DN 148:79258

Hydrolytic reactions of thymidine 5'-O-phenyl-N-alkylphosphoramidates, models of nucleoside 5'-monophosphate prodrugs

models of nucleoside 5'-monophosphate prodrugs Ora, Mikko; Ojanpezae, Jarne; leennberg, Harri Department of Chemistry, University of Turku, Turku, 20014, Finland Chemistry-A European Journal (2007), 13(30), 8591-8599 CODEN CEULED; ISSN: 0947-6539 Wiley-VCH Verlag ChBiz Co. KGaA AU

Journal

LA English

CASREACT 148:79258

os

AB To obtain detailed data on the kinetics of hydrolytic reactions of triester-like nucleoside 5'-O-aryl-N-alkylphosphoramidates, potential prodrugs of antiviral nucleoside monophosphates, the hydrolysis of diastereomeric (Rp/Sp) thymidine 5'={0-phenyl-N-[(18)-2-oxo-2-methoxy-1mathylethyllphosphoramidate (I) (R1 = H, R2 = Me, R3 = Ph), a phosphoramidate derived from the Me ester of L-alanine, has been followed by reversed-phase HPuC over the range from 10 = 0 to 90 to 90 to 90 to 90 to 90 for 90 to 90 for 90

According to the time-dependent product distributions, the hydrolysis of I (R1 - H, R2 - Me, R3 - Ph) proceeds at pH < 4 by two parallel routes, namely by nucleophilic displacement of the alaninyl ester moiety by a water mol. and by hydrolysis of the carboxylic ester linkage that allows intramol. attack of the carboxy group on the phosphorus atom, thereby resulting in the departure of either thymidine or phenol without marked accumulation of any intermediates. Both routes represent about half of the overall disappearance of I $(R1-H,\ R2-Me,\ R3-Ph)$. The departure of phenol eventually leads to the formation of thymidine 5 -phosphate. At pH > 5, the predominant reaction is hydrolysis of the carboxylic ester linkage followed by intramol. displacement of a phenoxide ion by the carboxylate ion and hydrolysis of the resulting cyclic mixed anhydride into an acyclic diester-like thymidine 5'-phosphoramidate. The latter product accumulated quant. without any indication of further decomposition Hydroxide-ion-catalyzed P-OPh bond cleavage of the starting material I occurred as a side reaction. Comparative measurements with thymidine 5'-{N-[(1S)-2-oxo-2-methoxy-1-methylethyl]phosphoramidate} I (R1 - Me, R2 H, R3 = H) revealed that, under acidic conditions, this diester-like compound is hydrolyzed by P-N bond cleavage three orders of magnitude more rapidly than the triester-like 3. At pH > 5, the stability order is reversed, with I (R1 = H, R2 = Me, R3 = Ph) being hydrolyzed six times as rapidly as I (R1 = Me, R2 = H, R3 = H). Mechanisms of the partial reactions are discussed. 960509-75-5P

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process)

(kinetics of hydrolytic bond cleavage of thymidine Ph oxomethoxymethylethyl phosphoramidates derived from Me ester of alanine)

RN 960509-75-5 CAPLUS

CN L-Alanine, N-[[P(S)]-P-phenyl-5'-thymidylyl]-, methyl ester (CA INDEX

Absolute stereochemistry.

IT 960509-79-9P

RL: PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process) (preparation of thymidine phosphoramidates by nucleophilic displacement of

(preparation of thymidine phosphoramidates by nucleophilic displacement of alaninyl ester molety by water mol. and by hydrolysis of carboxylic ester linkage)

RN 960509-79-9 CAPLUS

N L-Alanine, N-[[P(R)]-P-phenyl-5'-thymidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
RE.CNT 54 THERE ARE 54 CITED REFERENCES AVAILABLE FOR THIS RECORD

2007:941862 CADLUS

AN

ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

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147:301398
     Preparation of nucleoside aryl phosphoramidates for the treatment of
     RNA-dependent RNA viral infection
     Maccoss, Malcolm; Olsen, David B.; Donghi, Monica; Gardelli, Cristina;
Harper, Steven; Meppen, Malte; Narjes, Frank; Pacini, Barbara
     Merck & Co., Inc., USA; Istituto di Ricerche di Biologia Molecolare P.
     Angeletti S.p.A.
     PCT Int. Appl., 61 pp.
     CODEN: PIXXD2
FAN.CNT 1
     PATENT NO.
                          KIND
                                  DATE
                                              APPLICATION NO.
                                                                        DATE
     WO 2007095269
                           A2
                                  20070823
                                               WO 2007-US3862
     WO 2007095269
                           A3
                                  20071115
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
              CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
             KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
              MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
              RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
                                                                     IN. TR.
              TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
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KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA AU 2007-215114 AU 2007215114 2.1 20070823 20070212 CA 2637879 A1 CA 2007-2637879 EP 1987050 20081105 EP 2007-750684 A2 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, FT, RO, SE, SI, SK, TR 2009226850 T 20090723 JP 2008-555315 20070212 JP 2009526850 CN 101384609 Α CN 2007-80005274 20080813 PRAI US 2006-773009P

IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,

US 2006-832832P P 20060724 WO 2007-US3862 W 20070212

OS MARPAT 147:301398

AB The present invention provides nucleoside aryl phosphoramidates I, wherein Ar is Pi; Ri is H, F; Ri is F, Oke, OH, OR; A and R3 are independently alkyl-carbonyl, alkenyl-carbonyl, alkyl-carbonyl, cycloalkyl-carbonyl, cycloalkyl-carbonyl, mino acyl, R4 is H, alkyl, Ph, henzyl; R5 is H, Me; R4R5 together with the carbon atom to which they are attached form 3-to 6-membered aliphanic apiro-cyclic ring system; R6 is H, alkyl, alkyl, cycloalkyl, Ph, benzyl, addmantyl, R7 is H, alkyl-anbonyl, cycloalkyl, Ph, benzyl, addmantyl, R7 is H, alkyl-carbonyl of RNA-dependent R8A viral polymerase. Thus, These complex are precursors to inhibitors of RNA-dependent RNA viral infection. They are particularly

useful as precursors to inhibitors of hepatitis C virus (MCV) NSSB polymerase, as precursors to inhibitors of HGV replication, and/or for the treatment of hepatitis C infection. The invention also describes pharmaceutical compans containing such nucleoside anyl phosphoramidates alone or in combination with other agents active against RNA-dependent RNA viral infection, in particular RCV infection. Also disclosed are methods of inhibiting RNA-one, and/or results and the results of th

946511-06-4P 946511-12-2P 946511-14-4P 946511-16-6P 946511-18-8P 946511-20-2P 946511-21-3P 946511-22-4P 946511-23-5P 946511-25-7P 946511-26-8P 946511-27-9P 946511-28-0P 946511-29-1P 946511-30-4P 946511-31-5P 946511-33-7P 946511-34-8P 946511-35-9P 946511-36-0P 946511-37-1P 946511-38-2P 946511-39-3P 946511-40-6P 946511-41-7P 946511-42-8P 946511-43-9P 946511-46-2P 946511-44-0P 946511-45-1P 946511-48-4P 946511-49-5P 946511-50-8P 946511-51-9P 946511-52-0P 946511-53-1P 946511-56-4P 946511-54-2P 946511-55-3P 946511-57-5P 946511-58-6P 946511-59-7P 946511-61-1P 946511-62-2P 946511-63-3P 946511-64-4P 946511-66-6P 946511-67-7P 946511-68-8P 946511-69-9P 946511-70-2P 946511-71-3P 946511-72-4P 946511-74-6P 946511-76-8P 946511-78-0P 946511-79-1P 946511-80-4P 946511-81-5P 946511-82-6P 946511-95-1P 946512-01-2P 946512-02-3P 946512-06-7P 946512-07-8P 946512-08-9P 946512-09-0P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (USes)

(preparation of nucleoside aryl phosphoramidates for treatment of RNA-dependent RNA viral infection)
N 946511-06-4 CAPULS

CN L-Alanine, N-[[P(R)]-2'-C-methyl-P-1-naphthalenyl-5'-cytidylyl]-, butyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 946511-05-3 CMF C27 H35 N4 O9 P

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN

946511-08-6 CAPLUS L-Alanine, N-(2*-C-methyl-P-1-naphthalenyl-5*-cytidylyl)-, ethyl ester, 2,2,2-trifluoroscetate (1:1) (CA INDEX NAME)

CM

CRN 946511-07-5 CMF C25 H31 N4 09 P

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 02

RN

946511-10-0 CAPLUS L-Alanine, N-[P(R)]-P-[4-ohloro-5-methyl-2-(1-methylethyl)phenyl]-2'-C-methyl-3'-cytdylyl-, ethyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 946511-09-7 CMF C25 H36 C1 N4 O9 P

CM 2 CRN 76-05-1 CMF C2 H F3 02

RN 946511-12-2 CAPLUS

CN L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-,
(22)-9-octadecen-1-yl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 946511-11-1

CMP 637 H88 C1 N4 09 P

Absolute stereochemistry.
Double bond geometry as shown.

$$\begin{array}{c|c} H_2N & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

CRN 76-05-1 CMF C2 H F3 O2

RN 946511-14-4 CAPLUS
1-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester,
2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CRN 946511-13-3 CMF C21 H28 C1 N4 09 P

CM 2

CRN 76-05-1 CMF C2 H F3 O2

946511-16-6 CAPLUS L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, 1-methylethyl ester, 2,2,2-trifluoroscetate (1:1) (CA INDEX NAME)

CM 1

CRN 946511-15-5 CMF C22 H30 C1 N4 O9 P

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

946511-18-8 CAPLUS L-Alanine, N-[P-(4-chloropheny1)-2'-O-methy1-5'-oytidy1y1]-, buty1 ester, 2,2,2-trifluoroacetate (i:1) (CA INDEX NAME)

CM 1

CRN 946511-17-7 CMF C23 H32 C1 N4 O9 P

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 O2

946511-20-2 CAPLUS Glycine, N-(2 -C-methyl-P-l-naphthalenyl-5 -cytidylyl)-, butyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME) RN CN

CRN 946511-19-9 CMF C26 H33 N4 O9 P

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

946511-21-3 CAPLUS L-Alanine, N-[[P(R)]-2'-C-methyl-P-phenyl-5'-cytidylyl]-, 2-ethylbutyl

ester (CA INDEX NAME)

Absolute stereochemistry.

RN

946511-22-4 CAPLUS L-Alanine, N-(2'-O-methyl-P-phenyl-5'-cytidylyl)-, 2,2-dimethylpropyl ests: (CA INDEX NAME)

Absolute stereochemistry.

946511-23-5 CAPLUS

L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 2,2-dimethylpropyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 946511-22-4 CMF C24 H35 N4 09 P

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 O2

946511-25-7 CAPLUS

L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, octyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 946511-24-6 CMF C27 H41 N4 09 P

Absolute stereochemistry.

CM

CRN 76-05-1 CMF C2 H F3 O2

946511-26-8 CAPLUS L-Alanine, N-[[P(R)]-2'-C-methyl-P-phenyl-5'-cytidylyl]-, 2-propylpentyl ester (CA INDEX NAME) RN

Absolute stereochemistry.

RN

946511-27-9 CAPLUS L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 2-(hexyloxy)ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-28-0 CAPLUS RN

L-Alanine, N-(P-1H-indol-5-yl-2'-C-methyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

946511-29-1 CAPLUS

L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX

Absolute stereochemistry.

RN

946511-30-4 CAPLUS L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, cyclopropylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-31-5 CAPLUS

L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, methyl ester (CA INDEX

Absolute stereochemistry.

RN 946511-32-6 CAPLUS

L-Alanine, N-[2'-C-methyl-P-[4-(trifluoromethyl)phenyl]-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

RN 946511-33-7 CAPLUS
CN L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, propyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-34-8 CAPLUS CN L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, tricyclo[3,3,1:13,7]dec-2-yl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-35-9 CAPLUS CN L-Alanine, N-[P-(2-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

10/560 887

RN 946511-36-0 CAPLUS

CN L-Alanine, N-[P-(4-bromopheny1)-2'-C-methy1-5'-cytidyly1]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-37-1 CAPLUS
CN L-Alanine, N-[P-(4-methoxyphenyl)-2'-C-methyl-5'-cytidylyl]-, methyl ester
(CA INDEX NAME)

Absolute stereochemistry.

RN 946511-38-2 CAPLUS

L-Alanine, N-[P-(4-chloropheny1)-2'-C-methy1-5'-cytidyly1]-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-39-3 CAPLUS

N L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, 2-propen-1-yl ester (CA INDEX NAME)

RN

946511-40-6 CAPLUS L-Alanine, N-[2-C-methyl-P-[4-(trifluoromethoxy)phenyl]-5 -cytidylyl]-, ethyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

RN

946511-41-7 CAPLUS L-Alanine, N-(2'-C-methyl-P-2-naphthalenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

946511-42-8 CAPLUS L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, 2,2-difluoroethyl ester (CA INDEX NAME)

10/560 883

RN 946511-43-9 CAPLUS

CN L-Alamine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, phenyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-44-0 CAPLUS
CN L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-45-1 CAPLUS CN L-Alanine, N-[P-(2-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-46-2 CAPLUS
CN L-Alanine, N-[P-(4-chloro-1-naphthalenyl)-2'-C-methyl-5'-cytidylyl]-,
butyl ester (CA INDEX NAME)

946511-47-3 CAPLUS CN L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, cyclohexyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

946511-48-4 CAPLUS L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, octyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-49-5 CAPLUS L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, cyclopentyl ester (CA INDEX NAME)

RN 946511-50-8 CAPLUS
CN L-Alanine, N-[P-(4-chlorophenyl)-2-C-methyl-5-cytidylyl]-, 2-ethylbutyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-51-9 CAPLUS
CN L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-,
l-naphthalenyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-52-0 CAPLUS
CN L-Alanine, N-[2'-C-methyl-P-[5-methyl-2-(1-methylethyl)phenyl]-5'cytidylyl-, etbyl ester (CA INDEX NAME)

10/560 003

RN 946511-53-1 CAPLUS

1 L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, 4-methylpentyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-54-2 CAPLUS
CN L-Alanine, N-[P-(4-chlorophenyl)-2-C-methyl-5-cytidylyl]-, 3-methylbutyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-55-3 CAPLUS
CN L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, heptyl ester
(CA INDEX NAME)

Absolute stereochemistry.

RN 946512-56-4 CAPLUS CN L-Alanine, N-[P-(4-chloropheny1)-2'-C-methyl-5'-cytidylyl]-, 2-methoxyethyl, ester (CA INDEX NAME)

RN

946511-57-5 CAPLUS L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, 3-methoxypropyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-58-6 CAPLUS

L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, butyl ester (CA INDEX CN NAME)

Absolute stereochemistry.

RN

946511-59-7 CAPLUS L-Alanine, N-[2'-C-methyl-P-(2-methylphenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-60-0 CAPLUS RN

L-Alanine, N-[P-[4-chloro-5-methyl-2-(1-methylethyl)phenyl]-2'-C-methyl-5'-

cytidylyl]-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-61-1 CAPLUS
CN L-Alenine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 2-ethylbutyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-62-2 CAPLUS CN L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 4-methylpentyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946511-63-3 CAPLUS
CN L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 1-methylethyl ester
(CA INDEX NAME)

Absolute stereochemistry.

RN 946511-64-4 CAPLUS CN L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, 3-methylbutyl ester (CA INDEX NAME)

Absolute stereochemistry.

CN

CA INDEX NAME)

Absolute stereochemistry.

946511-67-7 CAPLUS L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, cyclohexylmethyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

946511-68-8 CAPLUS L-Alanine, N-(2'-C-methyl-P-phenyl-5'-cytidylyl)-, propyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-69-9 CAPLUS Cytidine, 2'-C-methyl-, 5'-[4-chlorophenyl N-[1-(methoxycarbonyl)cyclopentyl]phosphoramidate] (CA INDEX NAME) RN

RN

946511-70-2 CAPLUS Cytidine, 2'-C-methyl-, 5'-[4-chlorophenyl N-[(1S)-1-(ethoxycarbonyl)propyl]phosphoramidate] (CA INDEX NAME) CN

Absolute stereochemistry.

RN

946511-71-3 CAPLUS Alanthe, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-2-methyl-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

946511-72-4 CAPLUS L-Leucine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

946511-74-6 CAPLUS

L-Norleucine, N-[P-(4-chlorophenyl)-2 -C-methyl-5 -cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-76-8 CAPLUS Glycine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

946511-78-0 CAPLUS Cytidine, 2"-C-methyl-, 5"-[4-chlorophenyl N-[(18)-2-ethoxy-2-cxc-1-phenylethyl)phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

946511-79-1 CAPLUS

L-Norvaline, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

- RN 946511-80-4 CAPLUS
 CN L-Methionine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl
- Absolute stereochemistry.

ester (CA INDEX NAME)

- RN 946511-81-5 CAPLUS
 CN L-Tryptophan, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)
- Absolute stereochemistry.

- RN 946511-82-6 CAPLUS
 CN L-Alanine, N-[P-[2-(methoxycarbonyl)phenyl]-2'-C-methyl-5'-cytidylyl]-,
 ethyl ester (CA INDEX NAME)
- Absolute stereochemistry.

10/560.887

RN 946511-95-1 CAPLUS

In Lalanine, N-[[P(R)]-P-[1-[(1,1-dimethylethoxy)carbonyl]-1H-indol-5-yl]-2'C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946512-01-2 CAPLUS CN L-Alanine, N-[P-(4-chlorophenyl)-2'-C-methyl-5'-cytidylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 946512-02-3 CAPLUS
CN L-Alanine, N-(2'-C-methyl-P-1-naphthalenyl-5'-cytidylyl)-, methyl ester
(CA INDEX NAME)

Absolute stereochemistry.

RN 946512-04-5 CAPLUS

CN L-Alamine, N=[[P(8)]-2'-C-methyl-P-1-naphthalenyl-5'-cytidylyl]-, butyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM 1

CRN 946512-03-4 CMF C27 H35 N4 09 P

CM 2

CRN 76-05-1 CMF C2 H F3 O2

F-C-C02H

RN 946512-06-7 CAPLUS
CN 1-Alanie, N=[P(S)]-P-[4-chloro-5-methyl-2-(1-methylethyl)phenyl]-2'-Cmethyl-5'-cytidylyl]-, ethyl ester, 2,2,2-trifluoroacetate (1:1) (CAINDEX MAME)

CM 1

CRN 946512-05-6 CMF C25 H36 C1 N4 O9 P

Absolute stereochemistry.

CM 2

CRN 76-05-1 CMF C2 H F3 O2

RN 946512-07-8 CAPLUS
CN L-Alamine, N-[[P(S)]-2'-C-methyl-P-phenyl-5'-cytidylyl]-, 2-ethylbutyl
ester (CA INDEX NAME)

Absolute stereochemistry.

946512-08-9 CAPLUS L-Alanine, N-[P(8)]-2'-C-methyl-P-phenyl-5'-cytidylyl]-, 2-propylpentyl ester (CA INDEX NAME) CN

Absolute stereochemistry.

946512-09-0 CAPLUS RN L-Alanine, N-[[P(S)]-P-[1-[(1,1-dimethylethoxy)carbonyl]-1H-indol-5-yl]-2'-C-methyl-5'-cytidylyl]-, ethyl ester (CA INDEX NAME) CN

- ANSWER 13 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2007:619578 CAPLUS 147:46112
- Treatment of cancer and other diseases
- Habib, Nabil
- Nabil Habib Lab, Lebanon; Vianova Labs, Inc. PCT Int. Appl., 86pp. CODEN: PIXXD2 PA
- DT Patent
- LA English

FAN.	CNT 1																	
PATENT NO.					KIND		DATE		APPLICATION NO.						DATE			
														-				
PI	WO 2007064691			A1 20070607			WO 2006-US45665						20061130					
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,	
		CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
		GE,	GH,	GM,	GT,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	
		KP,	KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	
		MN,	MW,	MX,	MY,	MZ,	NA,	NG,	NI,	No,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	
		RS,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SM,	SV,	SY,	TJ,	TM,	TN,	TR,	TT,	
		TZ,	UA,	UG,	US,	UZ,	VC,	VN,	ZA,	ZM,	ZW							
	RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,	

CN

AN

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IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
                 KG, KZ, MD, RU, TJ, TM
      CA 2632903
                                   Al
                                                            CA 2006-2632903
      EP 1968607
                                   A1
                                           20080917
                                                           EP 2006-844623
           R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, III, LI, LI, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR 2009226431 A1 20090310 US 2009-8589 20090306
      US 20090226431
PRAI US 2005-741725P
      WO 2006-US45665
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
os
      MARPAT 147:46112
      The present invention relates to a novel compound (e.g.,
      24-ethyl-cholestane-3\beta, 5\alpha, 6\alpha-triol), its production, its use,
      and to methods of treating neoplasms and other tumors as well as other
      diseases including hypercholesterolemia, autoimmune diseases, viral diseases (e.g., hepatitis B, hepatitis C, or HIV), and diabetes.
      232925-18-7, Thymectacin
      RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
      (Biological study); USES (Uses)
           (treatment of cancer and other diseases using ethylcholestane triol and
           combination with other agents)
      232925-18-7 CAPLUS
```

L-Alanine, N-[5-[(1E)-2-promoethenyl]-2-deoxy-P-phenyl-5-uridylyl]-,

Absolute stereochemistry.

Double bond geometry as shown.

2007:538915 CAPLUS 146:522025

methyl ester (CA INDEX NAME)

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 14 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

```
Preparation of locked nucleic acid nucleoside phosphoramidates for use as
     therapeutic prodrugs in the treatment of cancer
     Rosenbohm, Christoph; Jensen, Jacob; Koch, Troels
     Santaris Pharma A/S, Den.
PA
    PCT Int. Appl., 34pp.
CODEN: PIXXD2
SO
    Patent
T.A
     English
FAN.CNT
    PATENT NO.
                         KIND
                                 DATE
                                             APPLICATION NO.
    WO 2007054100
                          A2
                                 20070518
                                             WO 2006-DK627
                                                                     20061113
     WO 2007054100
                          A3
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
             KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
             MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
             RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,

IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA 61 A2 20090916 EP 2006 EP 2099461 EP 2006-805565 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, CB, GR, HU, IE, IS, IT, LI, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR

CASREACT 146:522025; MARPAT 146:522025

LNA nucleoside phosphoramidites I, wherein B is a nucleobase; Ar is an (un)substituted aryl group; X can be O, S, or an (un)substituted amino group; R1 is an alkyl, aryl or alkylaryl group; R2 and R3 are independently H, alkyl, aryl or an alkylene chain; R4 is an H, OH, amino, azido, halo, alkyl, alkoxy, nitro group, etc.; and the available stereocenters can be present in any orientation, are prepared as inhibitors or cell proliferation. Thus, II was prepared from (1s,3R,4R,7s)-3-(adenin-9-y1)-7-hydroxy-1-hydroxymethyl-2,5-dioxabloyclo(2:2:1)heptane and Ph-(Benzyloxy-Lalaninyl) phosphorchloridated and tested as an anticancer chemotherapeutic prodrug in an MTS assay (over 80% inhibition at 0.1 µM after 24 h). Further, I were also tested in the same assay at concns. from 0.1 to 500 μM for between 24 and 96 h. and displayed an inhibition ranging from 20 to over 90%. As a result I can be effectively used as a prodrug in the therapeutic treatment of variety of cancer cells, most notably lung

936616-55-6P 936616-56-7P 936616-57-8P 936616-58-9P 936616-59-0P 936616-60-3P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation of locked nucleic acid nucleoside phosphoramidates for use as therapeutic prodrugs in the treatment of cancer) 936616-55-6 CAPLUS

L-Alanine, N-(hydroxyphenoxyphosphinyl)-, methyl ester, 4'-ester with 1-[2,5-anhydro-4-C-(hydroxymethyl)-α-L-lyxofuranosyl]-5-methyl-2,4(1H,3H)-pyrimidinedione (CA INDEX NAME)

936616-56-7 CAPLUS
1-Alanine, N-(hydroxyphenoxyphosphinyl)-, phenylmethyl ester, 4'-ester
with 1-(2,5-anhydro-4-C-(hydroxymethyl)-a-1-lyxofuranosyl]-5-methyl2,4(1H,3H)-pyrinidinedione (CA INDEX NAME) CN

Absolute stereochemistry.

936616-57-8 CAPLUS L-Alanine, N-[(4-chlorophenoxy)hydroxyphosphinyl]-, methyl ester, 4'-ester with 1-[2,5-anhydro-4-C-(hydroxymethyl)-a-L-lyxofuranosyl]-5-methyl-2,4(1M,3M)-pyrimidinedione (CA INDEX NAME) CN

Absolute stereochemistry.

936616-58-9 CAPLUS
L-Alanine, N-(hydroxyphenoxyphosphinyl)-, methyl ester, 4'-ester with
1-(2,5-anhydro-4-C-(hydroxymethyl)-\(\beta\)-D-lyxofuranosyl]-5-methyl2,4(1\(\beta\),3\(\beta\)-pyrinidinedione (CA INDEX NAME)

Absolute stereochemistry.

RN 936616-59-0 CAPLUS

L-Alanine, N-(hydroxyphenoxyphosphinyl)-, phenylmethyl ester, 4'-ester with 1-[2,5-anhydro-4-C-(hydroxymethyl)-B-D-lyxofuranosyl]-5-methyl-2,4(1B,3H)-pyrimidineione (CA INDEX NAME) CN

Absolute stereochemistry.

RN

936616-60-3 CAPLUS L-Alanine, N-[(4-ohl)rophenoxy)hydroxyphosphinyl]-, methyl ester, 4'-ester with 1-(2.5-shhydro-4-C-(hydroxymethyl)-B-D-lyxofuranosyl]-5-methyl-2,4(1E,3E)-pyrimidinedione (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 15 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 2007;538398 CAPLUS AN

10/560.887

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146 - 501355
     Phosphoramidate derivatives of FAU
     Shields, Anthony F.; Zemlicka, Jiri; Nimmagadda, Sridhar
PA
     Wayne State University, USA
    PCT Int. Appl., 40pp.
     CODEN: PIXXD2
1.2
    English
FAN.CNT 1
     PATENT NO.
                         KIND
                                DATE
                                             APPLICATION NO.
                                                                     DATE
     WO 2007056596
                                             WO 2006-US43882
                                                                     20061109
     WO 2007056596
                          A.3
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             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN,
             KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK,
             MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO,
             RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT,
             TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
             IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
             CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
             GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
             KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA
292553 Al 20081127 US 2008-92999
     US 20080292553
PRAI US 2005-734804P
     WO 2006-US43882
                          TJ
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
    CASREACT 146:501355; MARPAT 146:501355
```

AR Phosphoramidate derivs. of a furanosyluracil analog, FAU, (I) [R1 = H, F, alkyl; R4 = (un) substituted Ph; R2 and R3 = individually H, (un) substituted alkyl, alkoxy, alkylthio, Ph, aryloxy, cyano, alkoxycarbonyl, amino, alkylamido, alkylsulfonyl, arylsulfonyl, perfluoroalkylsulfonyl, alkylsulfinyl, arylsulfinyl, or R2 and R3 taken together with N are a heteroaryl or heterocyclic ring, and R2 and R3 are not H; R5 = F or F181 were prepared as effective intracellular delivers of FAU monophosphates to be converted to nucleoside monophosphates, which improves formation of nucleoside triphosphates and higher incorporation into DNA. The compds. of the invention can be used for cancer treatment. Thus, FAU [2,4(1H,3H)-pyrimidinedione, $1-(2-deoxy-2-fluoro-\beta-D-arabinofuranosyl)]$ in dry TFA was sonicated, and after addition of N-Me imidazole, a solution of Me chlorophenylphosphoryl P+N alaninate was added continuously over period of 4 h with continuous stirring to gave after work up or FAU-PA $[1-(2'-\text{deoxy}-2'-\text{fluoro}-\beta-D-\text{arabinofuranosyl})-\text{uracil}-5'-(phenylmethoxyalaninyl phosphate)] in 62.5% yield and showed inhibition of$ tumor cell growth higher then FAU. RL: DGN (Diagnostic use); PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use);

BIOL (Biological study); PREP (Preparation); USES (Uses)

10/560 88

(preparation of phosphoramidate alaninyl derivs. of FAU as antitumor and imaging agents)

BN 936363-09-6 CAPLUS

L-Alanine, N-(hydroxyphenoxyphosphinyl)-, methyl ester, 5'-ester with 1-(2-deoxy-2-fluoro-B-D-arabinofuranosyl)-2,4(18,3H)-pyrimidinedione, labeled with tritium (CA INDEX NAME)

Absolute stereochemistry.

IT 256520-25-9P 936363-07-4P

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of phosphoramidate alaninyl derivs. of FAU as antitumor and inaging agents) 256520-25-9 CAPLUS

CN L-Alanine, N-(P-phenyl-5'-thymidylyl)-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 936363-07-4 CAPLUS

L-Alanine, N-(hydroxyphenoxyphosphinyl)-, methyl ester, 5'-ester with 1-(2-deoxy-2-fluoro-B-D-arabinofuranosyl)-2,4(1H,3H)-pyrimidinedione (CA INDEX NAME)

- L4 ANSWER 16 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2007:299062 CAPLUS
- DN 146:501313
- Application of the Phosphoramidate ProTide Approach to 4'-Azidouridine Confers Sub-micromolar Potency versus Hepatitis C Virus on an Inactive Nucleoside
- AU Perrone, Plinio; Luoni, Giovanna M.; Kelleher, Mary Rose; Daverio, Pelice; Ancell, Annette; Mulready, Sinead; Congiatu, Costantino; Rajyaguru, Sonal; Martin, Joseph A.; Leveque, Vincent; Le Pogam, Sophie; Najera, Isabel; Klumpo, Klaus; Smith, David B.; McGulan, Christonher
- CS Welsh School of Pharmacy, Cardiff University, Cardiff, CF10 3XF, UK SO Journal of Medicinal Chemistry (2007), 50(8), 1840-1849
- SO Journal of Medicinal Chemistry (2007), 50(8), 1840-1849 CODEN: JMCMAR; ISSN: 0022-2623

10/560.887

- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 146:501313
 - 3 The authors report the application of their phosphoramidate ProTide technol, to the ribnounleoside analog 4-azidouridine to generate novel antiviral agents for the inhibition of hepatitis C virus (RCV). 4'Azidouridine did not inhibit RCV, although 4'azidouridine was a potent inhibitor of RCV replication under similar assay conditions. However 4'azidouridine triphosphate was a potent inhibitor of RCV application under similar assay conditions. However 4'azidouridine triphosphate was a potent inhibitor of RCV synthesis by RCV polymerase, raising the question as to whether the phosphoramidate ProTide approach could effectively deliver 4'-azidouridine monophosphate to RCV replicon cells and unleash the antiviral potential of the triphosphate. Twenty-two phosphoramidates were prepared, including variations in the aryl, ester, and amino acid regions. A number of compdession of the composition of t
- IT 936334-98-4P 936334-99-5P RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(lowest energy conformation; preparation and biol activity of amino acidand azidouridine-containing phosphoramidates as inhibitors of hepatitis C wime)

- 936334-98-4 CAPLUS
- N L-Alamine, N-[[P(R)]-4'-C-azido-P-1-naphthalenyl-5'-uridylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RN 936334-99-5 CAPLUS
- CN L-Alanine, N-[(P(S)]-4'-C-azido-P-1-naphthalenyl-5'-uridylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

IT 926308-43-2P 926308-46-5P 926308-63-6P 926308-66-9P 926308-74-9P 926308-77-2P 926308-82-9P 926308-83-0P 926308-87-4P 926308-92-8P 926309-06-0P

10/560,887

926309-08-2P 926309-09-3P 926309-12-8P 926309-21-9P 926309-73-1P 926309-75-3P

936334-95-1P 936334-97-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL

(Biological study); PREP (Preparation)
(preparation and biol. activity of amino acid- and azidouridine-containing phosphoramidates as inhibitors of hepatitis C virus)

RN 926308-43-2 CAPLUS

Uridine, 4'-C-azido-, 5'-[phenyl N-[1,1-dimethyl-2-oxo-2-(phenylmethoxy)ethyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-46-5 CAPLUS

CN Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-2-methyl-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-63-6 CAPLUS

CN Glycine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-66-9 CAPLUS

I. Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-74-9 CAPLUS

N L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, ethyl ester (CA

INDEX NAME)

Absolute stereochemistry.

RN 926308-77-2 CAPLUS

L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

CN

926308-82-9 CAPLUS Uridine, 4"-C-azido-, 5'-[phenyl N-[1-[(phenyl:methoxy):arbonyl]cyclopentyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

RN

926308-83-0 CAPLUS Uridine, 4'-C-azido-, 5'-[hydrogen N-[1-(ethoxycarbonyl)cyclopentyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-87-4 CAPLUS

L-Leucine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, ethyl ester (CA INDEX CN

RN 926308-99-8 CAPLUS

L-Valine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-04-8 CAPLUS RN

L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-06-0 CAPLUS L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-08-2 CAPLUS RN

L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

10/560.887

RN 926309-09-3 CAPLUS

IN D-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-12-8 CAPLUS

CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-21-9 CAPLUS

NAME)

L-Methionine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-73-1 CAPLUS

CN L-Glutamic acid, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1,5-diethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-75-3 CAPLUS

L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, butyl ester (CA INDEX NAME)

RN 936334-95-1 CAPLUS

L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1-methylpropyl ester (CA INDEX NAME)

Absolute stereochemistry.

- RN 936334-97-3 CAPLUS
- L-Alanine, N-(4'-C-azido-P-1-naphthalenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

- THERE ARE 27 CAPLUS RECORDS THAT CITE THIS RECORD (27 CITINGS) OSC.G 27 RE.CNT 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- ANSWER 17 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1.4
- AN 2007:201671 146:252063 CAPLUS
- DN
- Preparation of amino acid-containing nucleotide phosphoramidates as
- antiviral agents Klumpp, Klaus; Martin, Joseph Armstrong; Mcguigan, Christopher; Smith, David Bernard
- F. Hoffmann-La Roche A.-G., Switz. PCT Int. Appl., 145pp. PA
- SO CODEN: PIXXD2
- Patent

LA	Eng	11	8	3
FAN.	CNT	1		
	PAT	EN	T	NO

	PATENT NO.					KIN	D	DATE			APPLICATION NO.						DATE		
							-												
PI	WO 2007020193				A2		20070222			WO 2006-EP65021					20060803				
	WO 2007020193				A3		20071025												
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			CN,	CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,	
			GE,	GH,	GM,	HN,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	
			KR,	KZ,	LA,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	
			MW,	MX,	MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RS,	RU,	

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          RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
               IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
                GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
               CA 2618335
                              A2 20080611
                                                   EP 2006-778153
     R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LIT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR JP 2009504704 T 20090205 JP 2008-526475 20060803
     US 20070042988
                              A1
                                      20070222
                                                     US 2006-503558
     US 7608599
                                    20091027
      IN 2008CN00760
                              A
                                      20090821
                                                     IN 2008-CN760
                                                                                 20080214
                                                     CN 2006-80038238
     CN 101287472
                                      20081015
                              A
PRAI US 2005-708726P
                                     20050815
     WO 2006-EP65021
                                      20060803
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WU ZUUG-EPGSUZI W ZUUGUGUS ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS CASREACT 146:252063; MARPAT 146:252063

AB The invention provides novel nucleoside phosphoranidates I, wherein R and R2 are independently hydrogen, alkyl, alkylamine, hydroxylkyl, CR28H, (CR2) ZS(O) PMc. (CR2) XMC(-NH) NHZ, (HH-indol-3-yl) methyl, (LH-indoladol-4-yl) methyl, art and aryl-alkyl; R and R2 together are (CR2) R; Rish hydrogen, haloalkyl, aryl wherein said aryl is Ph or naphthyl optionally substituted with one to three substituents independently selected from the group consisting of alkyl, alkenyl, sulfonylamine, soyl, nitro and cyano; R3 is hydrogen, alkyl, haloalkyl, aryl aryl-alkyl wherein said aryl is phenyl; R4 is hydrogen, alkyl; R5 is saide, C.plbond.CH or -(Z)-CH-CR01; R6 is nucleobase; R7 is H, alkoxy; R8 is H, soyl; R9 is H, alkoxy; P = 0-2; n = 3-5 were prepared and are useful for the treatment of Hepatitis C Virus (RCV) mediated diseases. Thus, (S)-Z-[([ZR, S, 4R, SR)-2-azido-5-(Z, 4-dioxo-3, 4-dihydro-ZH-pyrimidin-1-yl-3, 4-dihydroxy tetrahydrofurar-2-ymethoxy) hydroxy volumine proposition of useful forease (CSD) - 0.864 mW). The proposition of useful forease (CSD) - 0.864 mW).

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926308-38-5P
                             926308-39-6P
926308-35-2P
926308-40-9P
              926308-42-1P
                              926308-43-2P
              926308-50-1P
                             926308-56-7P
926308-49-8P
926308-58-9P
              926308-59-0P
                              926308-61-4P
              926308-66-9P
                             926308-67-0P
926308-69-2P
              926308-70-5P
                             926308-71-6P
926308-72-7P
              926308-77-2P
                              926308-78-3P
926308-82-90
              926308-83-0P
                              926309-94-10
              926308-88-5P
926308-87-49
                             926308-91-0P
              926308-95-4P
                              926308-98-7P
926308-99-8P
              926309-01-5P
                              926309-03-7P
926309-04-8P
              926309-05-9P
                              926309-06-0P
926309-08-29
              926309-09-3P
                             926309-11-7P
926309-12-8P
              926309-15-1P
                             926309-18-4P
926309-19-5P
              926309-21-9P
                              926309-22-0P
926309-24-2P
              926309-29-7D
                             926309-30-0P
              926309-33-3P
                             926309-35-5P
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926309-36-6P
               926309-38-8P
                              926309-40-2P
926309-42-4P
               926309-43-5P
                              926309-45-7P
926309-46-8P
               926309-47-9P
                              926309-48-0P
926309-52-6P
               926309-56-0P
                              926309-64-0P
926309-67-3P
               926309-71-9P
                              926309-72-0P
926309-73-1P
                              926309-75-3P
926309-76-4P
               926309-77-5P
                              926309-80-0P
               926309-83-3P
                              926309-85-5P
926309-82-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
   (preparation of amino acid-containing nucleotide phosphoramidates as antiviral
   agents)
926308-35-2 CAPLUS
L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA
INDEX NAME)
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Absolute stereochemistry.

RN 926308-38-5 CAPLUS
CN L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1-methylethyl ester
(CA INDEX NAME)

Absolute stereochemistry.

RN 926308-39-6 CADLUS CN 1-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-40-9 CAPLUS
CN L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester
(CA INDEX NAME)

RN 926308-42-1 CAPLUS
CN Cytidine, 4'-C-azido-, 5'-[phenyl N-[1,1-dimethyl-2-oxo-2-(phenylmethoxy)ethyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-43-2 CAPLUS CN Uridine 4 -C-azido-, 5 -[phenyl N-[1,1-dimethyl-2-oxo-2-(phenylmethoxy)ethyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-49-8 CAPLUS
CN Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-2-methyl-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-50-1 CAPLUS
CN Alarine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-2-methyl-, 1-methylethyl ester (CA INDEX NAME)

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RN 926308-56-7 CAPLUS

CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1-methylpropyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-58-9 CAPLUS

CN D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX

Absolute stereochemistry.

RN 926308-59-0 CAPLUS

CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-61-4 CAPLUS

CN L-Alamine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 926308-63-6 CAPLUS

GN Glycine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-66-9 CAPLUS

L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1,1-dimethylethyl ester
(CA INDEX NAME)

Absolute stereochemistry.

RN 926308-67-0 CAPLUS

CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-69-2 CAPLUS

L-Alanine, N-(4'-C-ethynyl-P-phenyl-5'-uridylyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

RN 926308-70-5 CAPLUS

2,4(1H,3H)-Pyrimidinedione, 1-[5,6-dideoxy-4-C-(3-oxido-6-oxo-3-phenoxy-8phenyl-2,7-dioxa-4-aza-3-phosphaoct-1-yl)-α-L-lyxo-hex-5-ynofuranosyl]- (CA INDEX NAME)

Absolute stereochemistry.

926308-71-6 CAPLUS RN

L-Alanine, N-(4'-C-ethynyl-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-72-7 CAPLUS

D-Alanine, N-(4'-C-ethynyl-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-77-2 CAPLUS L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

McIntosh

926308-78-3 CAPLUS Cytidine, 4'-C-azido-, 5'-[phenyl N-[1-

[(phenylmethoxy)carbonyl]cyclopentyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

926308-82-9 CAPLUS

Uridine, 4'-C-azido-, 5'-[phenyl N-[1-

[(phenylmethoxy)carbonyl]cyclopentyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

926308-83-0 CAPLUS

Uridine, 4'-C-azido-, 5'-[hydrogen

N-[1-(ethoxycarbonyl)cyclopentyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

926308-84-1 CAPLUS

Uridine, 6'-C-azido-, 5'-[phenyl N-[1-[(1-methylethoxy)carbonyl]cyclopentyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

926308-87-4 CAPLUS

L-Leucine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, ethyl ester (CA INDEX NAME 1

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RN 926308-88-5 CAPLUS

CN L-Leucine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-91-0 CAPLUS

N L-Leucine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-93-2 CAPLUS

CN 1-Leucine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-95-4 CAPLUS

CN L-Leucine, N-(4'-C-azido-P-phenyl-5'-cytidyly1)-, phenylmethyl ester (CA INDEX NAME)

RN 926308-98-7 CAPLUS

CN L-Valine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926308-99-8 CAPLUS CN L-Valine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-01-5 CAPLUS CN L-Isoleucine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-03-7 CAPLUS

CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, methyl ester (CA INDEX NAME)

RN 926309-04-8 CAPLUS

NX 226309-04-8 CAPLUS
NX L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, methyl ester (CA INDEX
NAME)

Absolute stereochemistry.

RN 926309-05-9 CAPLUS

N D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-06-0 CAPLUS

CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-08-2 CAPLUS

CN L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

RN 926309-09-3 CAPLUS

D-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-11-7 CAPLUS RN

D-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-12-8 CAPLUS L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-15-1 CAPLUS RN

D-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1-methylpropyl ester (CA INDEX NAME)

926309-18-4 CAPLUS

D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, dodecyl ester (CA INDEX NAMEL

Absolute stereochemistry.

926309-19-5 CAPLUS

CN D-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, dodecyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-21-9 CAPLUS

CN L-Methionine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-22-0 CAPLUS

L-Methionine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

926309-24-2 CAPLUS L-Glutamic acid, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1,5-diethyl ester (CA INDEX NAME)

RN 926309-29-7 CAPLUS

L-Leucine, N-[4'-C-azido-P-(4-chlorophenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

926309-30-0 CAPLUS L-Leucine, N=[4"-C-azido-P-(4-chlorophenyl)-5"-uridylyl]-, ethyl ester (CA INDEX MAME) CN

Absolute stereochemistry.

926309-31-1 CAPLUS

L-Alanine, N-[4'-C-azido-P-(4-chlorophenyl)-5'-uridylyll-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-33-3 CAPLUS

D-Alanine, N-[4'-C-azido-P-(4-chlorophenyl)-5'-uridylyl]-, phenylmethyl ester (CA INDEX NAME)

RN

926309-35-5 CAPLUS L-Leucine, N=[4]-C-szido-P-(3,4-dichlorophenyl)-5 cytidylyl]-, ethylester (CA INDEX NAME)

Absolute stereochemistry.

- 926309-36-6 CAPLUS
- CN L-Leucine, N-[4'-C-azido-P-(3,4-dichlorophenyl)-5'-uridylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

- 926309-38-8 CAPLUS D-Alanine, N-[4'-C-azido-P-(3,4-dichlorophenyl)-5'-uridylyl]-, phenylmethyl ester (CA INDEX NAME)

- RN
- 926309-40-2 CAPLUS L-Alanine, N-[4'-C-azido-P-(4-methylphenyl)-5'-uridylyl]-, ethyl ester CN

(CA INDEX NAME)

Absolute stereochemistry.

926309-42-4 CAPLUS CN

L-Leucine, N=[4'-C-azido-P-(4-methylphenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-43-5 CAPLUS

L-Leucine, N-[4'-C-azido-P-(4-methylphenyl)-5'-uridylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-45-7 CAPLUS RN

L-Leucine, N-[4'-C-azido-P-(4-methoxyphenyl)-5'-cytidylyl]-, ethyl ester (CA INDEX NAME)

926309-46-8 CAPLUS

L-Alamine, N=[4'-C-azido-P-(4-methoxypheny1)-5'-cytidyly1]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-47-9 CAPLUS RN

L-Leucine, N-[4'-C-azido-P-(4-methoxyphenyl)-5'-uridylyl]-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

926309-48-0 CAPLUS L-Alanine, N-[4'-C-azido-P-(4-methoxyphenyl)-5'-uridylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-52-6 CAPLUS

L-Alanine, N-[4'-C-[(1Z)-2-chloroethenyl]-P-phenyl-5'-uridylyl]-, CN phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

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RN 926309-56-0 CAPLUS

N L-Alanine, N-[4'-C-azido-P-(1-bromo-2-naphthalenyl)-5'-uridylyl]-,
phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-64-0 CAPLUS CN L-Aspartic acid, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1,4-diethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-67-3 CAPLUS CN D-Alanine, N-(4'-C-zzido-P-phenyl-5'-cytidylyl)-, 1,1-dimethylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN 926309-71-9 CAPLUS

CN 1-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)

CM

CRN 926308-35-2 CMF C26 H30 N7 O9 P

CM

CRN 76-05-1 CMF C2 H F3 O2

926309-72-0 CAPLUS

CN L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, ethyl ester, formate (1:1) (CA INDEX NAME)

CRN 926308-35-2 CMF C26 H30 N7 09 P

Absolute stereochemistry.

CM 2

CRN 64-18-6 CMF C H2 02

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926309-73-1 CAPLUS L-Glutamic acid, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, 1,5-diethyl ester (CA INDEX NAME)

926309-74-2 CAPLUS

D-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, butyl ester (CA INDEX NAMEL

Absolute stereochemistry.

926309-75-3 CAPLUS

L-Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-76-4 CAPLUS

D-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, butyl ester (CA INDEX NAME)

Absolute stereochemistry.

926309-77-5 CAPLUS

L-Alanine, N-[4'-C-azido-P-(4-methylphenyl)-5'-cytidylyl]-, butyl ester (CA INDE NAME)

Absolute stereochemistry.

926309-80-0 CAPLUS

L-Alanine, N=(4'-C-azido-P-1-naphthalenyl-5'-uridylyl)-, 2,2,2-trifluoroethyl ester (CA INDEX NAME)

926309-82-2 CAPLUS

Jack No. 1 - Alanine, N-[4'-C-azido-2',3'-bis-O-(1-oxopentyl)-P-phenyl-5'-cytidylyl]-, phenylmethyl ester (CA INDEX NAME)

Absolute stereochemistry.

RN

926309-83-3 CAPLUS Cytidine, 4'-C-azido-, 5'-[phenyl N-[1-[(1-methylethoxy)carbonyl]cyclopentyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

926309-85-5 CAPLUS

L-Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-, 1-methylethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926308-44-3P 926308-46-5P 926308-74-9P

926308-79-4P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

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(preparation of amino acid-containing nucleotide phosphoramidates as antiviral

agents) 926308-44-3 CAPLUS

Alanine, N-(4'-C-azido-P-phenyl-5'-cytidylyl)-2-methyl-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926308-46-5 CAPLUS RN

Alanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-2-methyl-, ethyl ester (CA INDEX NAME)

Absolute stereochemistry.

926308-74-9 CAPLUS L-Phenylalanine, N-(4'-C-azido-P-phenyl-5'-uridylyl)-, ethyl ester (CA INDEX NAME) Absolute stereochemistry.

RN

926308-79-4 CAPLUS Cytidine, 4'-C-azido-, 5'-[phenyl N-[1-(ethoxycarbonyl)cyclopentyl]phosphoramidate] (CA INDEX NAME)

Absolute stereochemistry.

OSC.G THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

ANSWER 18 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 2006:1206158 CAPLUS

AN

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Phosphoramidate prodrugs for treatment of viral infection
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Gunic, Esmir; Chow, Suetying; Rong, Frank Valeant Research & Development, USA PA

PCT Int. Appl., 147pp. CODEN: PIXXD2 SO

Patent

English

LA

	PATENT NO.						D	DATE		APPLICATION NO.						DATE		
PI		2006121820				A1				WO 2006-US17314								
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
			CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KM,	KN,	KP,	KR,
			KZ,	LC,	LK,	LR,	LS,	LT,	LU,	LV,	LY,	MA,	MD,	MG,	MK,	MN,	MW.	MX,
			MZ,	NA,	NG,	NI,	NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,
			SG,	SK,	SL,	SM,	SY,	TJ,	TM,	TN,	TR,	TT.	TZ,	UA,	UG,	US,	UZ,	VC,
			VN,	YU,	ZA,	ZM,	ZW											
		RW:	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,	ES,	FI,	FR,	GB,	GR,	HU,	IE,
			IS,	IT,	LT,	LU,	LV,	MC,	NL,	PL,	PT,	RO,	SE,	SI,	SK,	TR,	BF,	BJ,
			CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG,	BW,	GH,
			GM,	KE,	LS,	MW,	MZ,	NA,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,		TJ,	TM										
PRAI					P													
	US 2005-748034P				P		2005	1206										

US 2005-748034P MARPAT 145:500034 os

The invention concerns 2'-Me ribonucleotide phosphoramidates which are AB neutral prodrugs which are converted in vivo to 2'- Me ribonucleotide triphosphates. These compds. are useful in the treatment of viral infection. Of particular interest are prodrugs of a

methylsulfonylhydrazinyl purine 2'-Me nucleotide triphosphate: 2'-methyl-N6-aikyl-N6- (N-methylsulfonamide) ATP and its 2-amino derivative 1075702-77-3 1075705-71-3 1075716-43-5

1075716-46-9 1075716-47-0 1075716-48-1 1075716-49-2

1075716-55-0 1075716-56-1 1075716-64-1 1075717-12-2 1075720-37-4 1075721-70-8 1075721-76-4 1075721-77-5 1075721-80-0

1075721-82-2 1075721-85-5 1075721-86-6 1075721-94-6 1075738-82-7 RL: PRPH (Prophetic) (Phosphoramidate prodrugs for treatment of viral infection)

1075703-77-3 CAPLUS INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

1075705-71-3 CAPLUS INDEX NAME NOT YET ASSIGNED

RN CN 1075716-43-6 CAPLUS INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

- 1075716-44-7 CAPLUS INDEX NAME NOT YET ASSIGNED CN

Absolute stereochemistry.

1075716-45-8 CAPLUS INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

McIntosh

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RN 1075716-46-9 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

1075716-47-0 CAPLUS INDEX NAME NOT YET ASSIGNED CN

Absolute stereochemistry.

1075716-48-1 CAPLUS INDEX NAME NOT YET ASSIGNED RN CN

Absolute stereochemistry.

1075716-49-2 CAPLUS INDEX NAME NOT YET ASSIGNED CN

RN CN 1075716-50-5 CAPLUS INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

1075716-53-8 CAPLUS INDEX NAME NOT YET ASSIGNED

CN

Absolute stereochemistry.

1075716-55-0 CAPLUS INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

1075716-56-1 CAPLUS INDEX NAME NOT YET ASSIGNED RN CN

10/560 88

Absolute stereochemistry.

RN 1075716-57-2 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1075716-64-1 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1075716-65-2 CAPLUS CN INDEX NAME NOT YET ASSIGNED

RN 1075716-70-9 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1075717-09-7 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1075717-12-2 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

McIntosh

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1075720-37-4 CAPLUS INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

1075721-70-8 CAPLUS INDEX NAME NOT YET ASSIGNED RN CN

Absolute stereochemistry.

1075721-76-4 CAPLUS INDEX NAME NOT YET ASSIGNED RN

Absolute stereochemistry.

1075721-77-5 CAPLUS

INDEX NAME NOT YET ASSIGNED

RN 1075721-80-0 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1075721-82-2 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

RN 1075721-85-5 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

McIntosh

10/560,887

RN 1075721-86-6 CAPLUS CN INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.

1075721-94-6 CAPLUS INDEX NAME NOT YET ASSIGNED CN

Absolute stereochemistry.

1075737-66-4 CAPLUS INDEX NAME NOT YET ASSIGNED RN CN

Absolute stereochemistry.

1075738-82-7 CAPLUS INDEX NAME NOT YET ASSIGNED

CN

107560 88

IT 914912-07-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(phosphoramidate prodrugs for treatment of viral infection)

- RN 914912-07-5 CAPLUS
- CN Alanine, N-[(4-chlorophenoxy)hydroxyphosphinyl]-2-methyl-, methyl ester, 5'-ester with 2'-C-methylcytidine (9CI) (CA INDEX NAME)

- OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)
 RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT
- L4 ANSWER 19 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2005:1315892 CAPLUS
- DN 144:163499
 - Novel Potential Anticancer Naphthyl Phosphoramidates of BVdU: Separation of Disstereoissmers and Assignment of the Absolute Configuration of the Phosphorus Center
- AU Congiatu, Costantino; Brancale, Andrea; Mason, Malcolm D.; Jiang, Wen G.; McGuigan, Christopher
- CS Welsh School of Pharmacy, Cardiff University, Cardiff, CF10 3XF, UK
- SO Journal of Medicinal Chemistry (2006), 49(2), 452-455 CODEN: JMCMAR: ISSN: 0022-2623
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 144:163499
- AB We have previously reported our SAR optimization of the anticancer agent thymectacin. Tuning of the parent Profide structure initially involved the amino acid and, subsequently, the aromatic masking group on the phosphate modety. Herein, derive, bearing the combined modifications are reported and biol. evaluation is described. Moreover, separation of the disastereoisomeric final product mixture shows a different cytostatic activity for the two disastereoisomers. Through computational and MNR studies, the absolute stereochem, of the phosphorus center of the two disastereoisomers has been suggested.

 IT 8743C-33-10 8743C-34-20
- 11 874562-33-1P 874562-34-2P RL PRC (Paraphological activity); PRP (Properties); PUR (Purification or recovery); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 - (novel potential anticancer naphthyl phosphoramidates of BVdU: separation of diasterecisomers and assignment of absolute configuration of phosphorus

center)

874362-33-1 CAPLUS D-Alanine, N-[[P(R)]-5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 874362-34-2 CAPLUS

D-Alanine, N-[[P(S)]-5-[(1E)-2-bromoetheny1]-2'-deoxy-P-1-naphthaleny1-5'-uridyly1]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

874362-03-5P 874362-04-6P 874362-05-7P 874362-06-8P 874362-07-9P 874362-08-0P 874362-09-1P 874362-10-4P 874362-11-5P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

874362-02-4P

(Preparation): USES (Uses)

(novel potential anticancer naphthyl phosphoramidates of BVdU: separation of diastereoisomers and assignment of absolute configuration of phosphorus center!

874362-00-2 CAPLUS

874362-00-2P

Alanine, N=[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

874362-01-3 CAPLUS

Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 874362-02-4 CAPLUS

L-Tsoleucine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

874362-03-5 CAPLUS

L-Isoleucine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

874362-04-6 CAPLUS Glycine, N-[5-([1E]-2-bromoethenyl]-2 -deoxy-P-1-naphthalenyl-5 -uridylyl]-2-phenyl-, methyl ester, (28)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

874362-05-7 CAPLUS L-Valine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-1-naphthaleny1-5'-uridyly1'-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

874362-06-8 CAPLUS L-Valine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

107560 883

Absolute stereochemistry.
Double bond geometry as shown.

RN 874362-07-9 CAPLUS

CN

L-Phenylalanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 874362-08-0 CAPLUS

NN L-Phenylalanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 874362-09-1 CAPLUS

10/560 88

CN D-Alanine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-1-naphthaleny1-5'uridyly1]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 874362-10-4 CAPLUS

CN L-Methionine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 874362-11-5 CAPLUS

CN L-Alanine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-1-naphthaleny1-5'-uridyly1]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

OSC.G 12 RE.CNT 23 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS) THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 20 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2005:1290072 CAPLUS

144:46998 DN

The x-ray crystal structure of BRCA1 tandem BRCT repeat and BACH1 phosphopeptide complex and methods and compositions for antitumor drug destan

Yaffe, Michael B.; Clapperton, Julie A.; Manke, Isaac A.; Lowery, Drew M.; Ho, Timmy; Haire, Lesley F.; Smerdon, Stephen J. Massachusetts Institute of Technology, USA IN

PA

PCT Int. Appl., 360 pp. CODEN: PIXXD2 so

LA English

PAT	ENT																
WO	2005	54		A2													
	W:	CN, GE, LC, NG, SL,	CO, GH, LK, NI, SM,	CR, GM, LR, NO, SY,	CU, HR, LS, NZ,	CZ HU LT OM	DE, ID, LU, PG,	DK, IL, LV, PH,	DM, IN, MA, PL,	DZ, IS, MD, PT,	EC. JP. MG. RO.	EE, KE, MK, RU,	EG, KG, MN, SC,	ES, KM, MW, SD,	FI, KP, MX, SE,	GB, KR, MZ, SG,	GD, KZ, NA, SK,
	RW:	BW, AZ, EE, RO,	GH, BY, ES, SE,	GM, KG, FI, SI,	KZ, FR, SK,	MD GB TR	RU, GR, BF,	TJ, HU, BJ,	TM, IE, CF,	AT, IS, CG,	BE,	BG, LT,	CH, LU,	CY, MC,	CZ,	DE, PL	DK, PT,
CA	2569 1773	2473 003 389 AT, IS,	BE,	BG,	A1 A1 A2 CH, LT,	CY,	2005 2005 2007 CZ,	1208 1208 0418 DE,	DK,	AU 2 CA 2 EP 2 EE,	005- 005- ES,	2569 7800 FI,	003 60 FR,	GB,	2 GR,	0050 0050 HU,	509 509 IE,
US US US WO	2 2007537164 3 20090143997 3 2004-569131P 3 2005-126022 2 2005-US15981				T A1 P B3		2009 2004 2005 2005	0604 0507 0509 0509		US 2	008-		20080826				
	AU CA EP US WO	AU 2005 CA 2569 EP 1773 R: JP 2007 US 2009 US 2009 US 2005 W 2005	PATENT NO. WO 200511544 WO 200511544 WO 200511544 WO 200511545 WO 200511545 RO SL, LC, C, NG, SL, LC, C, LC, C, LC, C, LC, C, LC, C, LC, C, LC, L	PATENT NO. WO 2005115454 W: AZ, AG, GG, CG, GG, CG, K, C	PATENT NO. WO 2005115454 W: AZ, AZ, AL, GC, CS, CS, GG, GK, GS, GG, GK, GK, GG, GK, GK, GG, GK, GK, GG, GK,	PATENT NO. KIN WO 2005115454 A2 W: AZ, AG, AL, AM, CG, CG, CG, CG, CG, GG, CG, CG, CG, CG, GG, CG, CG, CG, CG, GG, CG,	PATENT NO. KIND W0 2005115454 A2 W: AZ, AG, AL, AM, A, A, A, C, CG, CG, CG, CG, CG, CG, CG, CG, CG,	PATENT NO. KIND DATE W0 2005115454 A2 2007 W: AZ, AG, AL, AM, AT, AG, BE, GG, GG, GG, GG, GG, GG, GG, GG, GG, G	PATENT NO. KIND DATE W0 2005115454 A2 20051208 W1 A2, A3, A1, A4, A7, A4, A7, A2, C3, C3, C4, C4, C5, C7, C7, C7, C7, C7, C7, C7, C7, C7, C7	PATENT NO. KIND DATE W0 2005115454 A2 20051208 W1 A2, A3, A1, AM, A7, A1, A2, BA, C3, C3, C4, C4, C4, D4, D4, D4, D4, D4, D4, D4, D4, D4, D	PATENT NO. KIND DATE APPL W0 2005115454 A2 20051208 W0 2 W1 A2, A3, A1, A4, A7, A4, A7, A8, B8, B4, B4, B4, B4, B4, B4, B4, B4, B4, B4	PATENT NO. KIND DATE APPLICAT WO 2005115454 A. A. 20051208 WO 2005- NO 2005115454 A. A. A. 20071115 M. OZOVILIS N. N. A. C. A. A. A. A. A. A. A. B. A. B. B. B. B. C.	PARENT NO. KIND DATE APPLICATION W0 2005115454 A2 20051208 W0 2005-US15 W1 AE, AG, AL, AM, AT, AL, AE, BA, BB, BG, BR, CN, CO, CR, CL, CL, BE, BK, DM, DZ, EC, EE, CL, CL, KL, AE, AE, AE, AE, AE, AE, AE, AE, AE, AE	PARENT NO. KIND DATE APPLICATION NO. WO 2005115454 A2 2005128 W0 2005-US15981 NO. 200512554 A3 20071115 No. 200512654 A3 20071115 No. 200512654 No. 20051265 No. 20071115 No. 2007115 No. 20071115 No. 20071115 No. 20071115 No. 20071115 No. 2007115 No. 200	PARENT NO. KIND DATE APPLICATION NO. WO 2005115454 A2 20051208 WO 2005-US15981 WI AE, AG, AL AM, AT, AU, AZ, BA, BB, BB, BG, BR, BM, BY, CN, CO, CR, CU, CZ, BE, CE, CB, CE, CB, CB, CB, CB, CB, CB, CB, CB, CB, CB	PARENT NO. KIND DATE APPLICATION NO. D WO 2005115454 A2 20051208 WO 2005-US15981 2 WI AE, AG, AL AM, AT, AU, AZ, BA, BB, BG, BR, BM, BY, BZ, CL, CL, CL, CL, CL, CL, CL, CL, CL, CL	PATENT NO. KIND DATE APPLICATION NO. DATE WO 2005115454 A2 20051208 WO 2005-US15981 20050 WI AB, AB, AL, AB AT, 2071115 BA, BB, BG, BR, BM, BY, BZ, CA, CA, CA, CA, CA, CA, CA, CA, CA, CA

non-peptides) that treat, prevent or stabilize cellular proliferative disorders and methods of treating, preventing, or stabilizing such disorders. The invention also provides three-dimensional structures of a BRCT domain-BACH1 phosphopeptide complex.

232925-18-7, Thymectacin RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL

(Biological study); USES (Uses) (x-ray crystal structure of BRCA1 tandem BRCT repeat and BACH1 phosphopeptide complex and methods and compns. for antitumor drug

design) 232925-18-7 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

- ANSWER 21 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2005:1151332 CAPLUS
- DN 145:271969
 - Naphthyl phosphoramidate derivatives of BVdU as potential anticancer wagniniy phosphinalidate derivatives of studies potential anticamina agents: Design, synthesis and biological evaluation Congistu, C.; McGuiyan, C.; Jiang, W. G.; Davies, G.; Mason, M. D. Welsh School of Pharmacy, Cardiff UNIVersity, Cardiff, UNIVERSITY, CARDINIC CONTROL of Pharmacy, Cardiff UNIVersity, Cardiff, UNIVERSITY, CARDINIC CARDINIC CONTROL OF CARDINIC CONTROL CONTROL OF CARDINIC CONTROL OF CARDINIC CONTROL CONTROL CONTROL CONTROL CO
- ΑU
- CODEN: NNNAFY; ISSN: 1525-7770 Taylor & Francis, Inc.
- Journal
- LA English
- CASREACT 145:271969 OS

- The phosphoramidate technol, has been recently applied to BVdU, leading to NB1011 (NewBiotics Inc., California), a novel potential anticancer compound recently entered into phase 2 of the clin, trials for colon cancer. A new series of derivs. containing naphthol and amino acid moieties as aryl masking group on the phosphate moiety, e.g. I, which has shown a significant increase in anticancer activity in preliminary biol, evaluations, is reported.
- 232925-18-7, NB 1011
 - RL: PAC (Pharmacological activity); BIOL (Biological study) (preparation of naphthyl phosphoramidate derivs, of bromovinyl deoxyuridine (BVdU) as anticancer agents)
- RN
- 232925-18-7 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

906670-26-6P 906670-27-7P 906670-29-9P 906670-32-4P 906670-30-2P

906670-31-3P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation of naphthyl phosphoramidate derivs. of bromovinyl deoxyuridine (BVdU) as anticancer agents) 906670-25-5 CAPLUS RN

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

906670-26-6 CAPLUS RN

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

906670-27-7 CAPLUS

10/560.88

CN L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

N 906670-28-8 CAPLUS

CN L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2-deoxy-P-2-naphthalenyl-5uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 906670-29-9 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-2-naphthalenyl-5'-uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 906670-30-2 CAPLUS

CN L-Alanine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-2-naphthaleny1-5'-uridyly1]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

CN

Double bond geometry as shown.

906670-31-3 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-P-(4-chloro-1-naphthalenyl)-2'-deoxy-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

906670-32-4 CAPLUS L-Alanine, N-[5-([1])-2-bromoethenyl]-2-deoxy-P-(4-methoxy-1-naphthalenyl)-5'-uriqy[yl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

874362-02-4P 874362-03-5P 874362-04-6P 874362-05-7P 874362-06-8P 874362-07-9P

874362-08-0P 874362-09-1P 874362-10-4P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of naphthyl phosphoramidate derivs, of bromovinyl deoxyuridine (BVdU) as anticancer agents)

874362-02-4 CAPLUS L-Isoleucine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

CN uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

874362-04-6 CAPLUS

Glycine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-2-phenyl-, methyl ester, (2S)- (9CI) (CA INDEX NAME)

874362-05-7 CAPLUS

L-Valine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN

874362-06-8 CAPLUS L-Vallne, N-[5-[(IE)-2-bromoethenyl]-2-deoxy-P-1-naphthalenyl-5-uridylyl]-, phenylmethyl ester (901) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

874362-07-9 CAPLUS

L-Phenylalanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

874362-08-0 CAPLUS L-Phenylalanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

874362-09-1 CAPLUS D-Alanine, N-[5-([18]-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

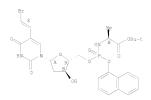
RN

874362-10-4 CAPLUS L-Methionine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN CN

874362-11-5 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-1-naphthalenyl-5'uridylyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)



- THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS) THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT osc.g 6 RE.CNT 5
- ANSWER 22 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2005:409543 CAPLUS
- DN 142:457053
- Human protein IAP (inhibitor of apoptosis protein) nucleobase oligomers, including dsRNA, shRNA, and siRNA, and their use for enhancing apoptosis in cancer therapy Lacasse, Eric; McManus, Daniel Aegera Therapeutics, Inc., Can. PCT Int. Appl., 112 pp. CODEN: PIXXD2
- PA
- SO
- Patent
- T.A
- English

	PATI	ENT :	NO.			KIN	D	DATE			APPL	ICAT	DATE					
			-															
PI	WO:	A1	A1 2005			50512 WO 2004-CA1902						20041029						
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
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			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
								LV,										
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			T.T.	TM.	TN.	TR.	TT.	TZ.	TIA.	HG.	IIS.	IIZ.	VC.	UN.	YII.	ΖΔ.	ZM.	7.W

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RW: BW, GH, GM, KE, LS, RW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NI, PL, PT, RO, SE,
                  SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                  SN. TD. IG
       US 20050148535
                                                              US 2004-975974
      CA 2542904
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                                                                                               20041029
                                    A1
       EP 1682565
                                                              ED 2004-789809
                                                                                               20041029
            R: DE, FR, GB
                                                              JP 2006-537024
PRAI US 2003-516192P
       WO 2004-CA1902
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The invention provides nucleobase oligomers and oligonucleotide duplexes that inhibit expression of an IAP (inhibitor of apoptosis protein), and methods for using them to induce apoptosis in a cell. Specifically, the invention provides nucleic acid sequences for siRNAs and shRNAs that target human XIAP, HIAP-1 or HIAP-2 genes. The nucleobase oligomers and oligomer complexes of the present invention may also be used to form pharmaceutical compns. The invention also features methods for enhancing apoptosis in a cell by administering a nucleobase oligomer or oligomer complex of the invention in combination with a chemotherapeutic or chemosensitizing agent. RNAi seguences and vectors producing shRNA (short hairpin RNA) were transfected into HeLa cells and evaluated for their effect on XIAP, cIAP-1, or cIAP-2 protein levels. XIAP protein could also be reduced by RNAi clones in transfected breast cancer cell line MDA-MB-231 In addition, cell survival was reduced in XIAP RNAi transfected breast cancer cell line after the transfected cells were treated with TRAIL (tumor necrosis factor-related apoptosis inducing ligand).

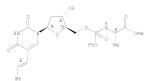
232925-18-7, Thymectacin RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (human protein IAP (inhibitor of apoptosis protein) nucleobase oligomers, including dsRNA, shRNA, and siRNA, and their use for

enhancing apoptosis in cancer therapy) 232925-18-7 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) OSC.G RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 23 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 2005:409357 CAPLUS
- AN
- DN 142:457052
- Sequences of antisense IAP (inhibitor of apoptosis protein) oligomers and their use for treatment of proliferative diseases with a chemotherapeutic
- Lacasse, Eric; McManus, Daniel; Durkin, Jon P.
- Aegera Therapeutics, Inc., Can.
- PCT Int. Appl., 285 pp. 90 CODEN: PIXXD2
- Patent
- LA English
- FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE

PI	WO	2005	0420	30				2005	0512					20041029					
												BG.							
												EC.							
			GE.	GH.	GM.	HR.	HU.	TD.	Th.	TN.	TS.	JP.	KE.	KG.	KP.	KR.	KZ.	LC.	
												MK.							
			NO.	NZ.	OM.	PG.	PH.	PL.	PT.	RO.	RU.	SC.	SD.	SE.	SG.	SK.	SL.	SY.	
												UZ.							
		BW:	BW.	GH.	GM.	KE.	LS.	MW.	MZ.	NA.	SD.	SL,	SZ.	TZ.	UG.	ZM.	ZW.	AM.	
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			EE.	ES,	EI,	ER,	GB,	GR,	HU,	IE.	IT,	LU.	MC,	NL,	PL,	PT,	RO.	SE,	
			SI.	SK.	TR.	BE.	BJ.	CE,	CG.	CI.	CM.	GA.	GN.	GO.	GW.	ML.	MR.	NE.	
				TD,															
	US	2005	0119	217		A1.		2005	0602		US 2	004-	9757	90		2	0041	028	
		2004									AU 2	004-	2848	55		2	0041	029	
	CA	2542							0512			004-							
	EP	1691	842			A1		2006	0823		EP 2	004-		2	0041	029			
		R:	AT,	BE,	CH,	DE,	DK,	ES,	ER,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,	
			IE,	SI,	LT,	LV,	EI,	RO,	MK,	CY,	AL,	TR,	BG,	CZ,	EE,	HU,	PL,	SK,	HE
	BR	2004	0157	79		A.		2006	1226		BR 2	004-	1577		20041029				
	CN	1901	939			A		2007	0124						20041029				
	JP	2007	5098	61		T		2007	0419			006-							
	ZA	1901 2007 2006	0033	99		A		2007	0926			006-							
	NZ	5471	91			A		2009	0828		NZ 2	004-	5471	91		2	0041	029	
		2376							1220			006-							
	SG	1574	22			A1			1229			009-							
		2006						2007				006-							
	IN	2006	MNOO	614		A		2007				006-							
	NO	2006	0024	20		A			0731			006-							
		2006									KR 2	006-	7106	19		2	0060	530	
PRA1		2003						2003											
	WO	2004	-CA1	900		W		2004	1029										

ASSIGNMENT HISTORY EOR US PATENT AVAILABLE IN LSUS DISPLAY EORMAT

- The invention claims the use of an antisense oligomer to human XIAP, IAP-1 or IAP-2 genes and a chemotherapeutic agent, and compns. and kits thereof, for the treatment of proliferative diseases. The invention further claims sequences for nucleobase oligomers that are antisense IAP (inhibitor of apoptosis protein) oligomers. The antisense IAP nucleobase oligomers specifically hybridize with polynucleotides encoding an IAP and reduce the amount of an IAP protein produced in a cell. Thus by reducing the IAP protein, the invention provides methods for inducing cancer cells to undergo apoptosis and for overriding anti-apoptotic signals in cancer cells. As an example of the invention, mice with s.c. H460 human lung carcinoma xenografts were injected intratumorally with XIAP antisense mixed-base 2'-0-Me RNA oligonucleotides (C5 and/or G4) and the drug vinorelbine. At the end of the 24 d treatment period, the mean relative tumor growth was reduced .apprx.70% in treated mice. The inhibition of tumor growth was correlated with down-regulation of human XTAP protein expression and an increased number of dead cells. The mice did not show any signs of cytotoxicity such as body weight loss.
- IT 232925-19-7, Thymotacin (RL 1910) (Biological study); USES (Uses) (Seguences of antisense TAP (inhibitor of apoptosis protein) oligomers and their use for treatment of proliferative diseases with chemotherapeutic agent)
- RN 232925-18-7 CAPLUS
- CN L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS) OSC.G RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 24 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 2005:288972 CAPLUS
- 143:7925
- - Anti-cancer Profides: tuning the activity of BVDU phosphoramidates related to thymectacin
- ΑU McGuigan, Christopher, Thiery, Jean-Christophe, Daverio, Felice; Jiang, Wen G., Davies, Gaynor; Mason, Malcolm Welsh School of Pharmacy, Cardiff University, Cardiff, CF10 3XF, UK
- Bioorganic & Medicinal Chemistry (2005), 13(9), 3219-3227 so
- CODEN: BMECEP; ISSN: 0968-0896 Elsevier Ltd.
- LA English OS
- CASREACT 143:7925
- AB Based on our wide ranging knowledge of phosphoramidate ProTides as anti-viral agents we have tuned the lead anti-cancer agent thymectacin in the ester and amino acid regions and revealed a substantial enhancement in in vitro potency vs. colon and prostate cancer cell lines. Twelve analogs have been reported, with yields of 29-78%. The compds. are fully characterized and data clearly reveal the presence of two phosphate diastereoisomers, as expected, in roughly equi-molar proportions. The compds, were evaluated in tissue culture vs. three different tumor cell lines, using thymectacin as the control. It is notable that minor structural modification of the parent Ph methoxyalaninyl structure of thymectacin leads to significant enhancements in potency. In particular, replacement of the Me ester moiety in the lead by a benzyl ester gave a 175-fold boost in potency vs. colon cancer HT115. This derivative emerges as a low micromolar inhibitor of HT115 cells and a new lead for further optimization.
- 232925-18-7P 535958-46-4P 840505-89-7P 840505-93-3P
 - 840505-98-8P 840505-99-9P 840506-00-5P 840506-10-7P 840506-11-8P 840506-09-4P
 - RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
- (preparation of thymectacin analogs as potential anti-cancer agents) 232925-18-7 CAPLUS
- L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

RN 436097-54-0 CAPLUS
CN L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2-deoxy-P-phenyl-5-uridylyl]-,
phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 436097-55-1 CAPLUS
CN Alanine, N-[5-[(1E)-2-bromoethenyl]-2-deoxy-P-phenyl-5-uridylyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 535958-46-4 CAPLUS
CN L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, ethyl ester (9C1) (CA INDEX NAME)

840505-89-7 CAPLUS

L-Alamine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-fluorophenyl)-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840505-93-3 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl)-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840505-98-8 CAPLUS L-Alanine, N-[5-([1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl-, phenylmethyl ester (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

840505-99-9 CAPLUS

Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-00-5 CAPLUS

Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-09-4 CAPLUS Uridine, 5-[(18)-2-bromoethenyl]-2'-deoxy-, 5'-[phenyl [1-(methoxycarbonyl)cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

840506-10-7 CAPLUS

Uridine, 5=[(1E]-2-bromoethenyl]-2'-deoxy-, 5'-[phenyl [1-(ethoxycarbonyl)cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

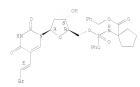
Absolute stereochemistry.

Double bond geometry as shown.

840506-11-8 CAPLUS

Uridine, 5-[(1E)-2-bromoethenyl]-2'-deoxy-, 5'-[phenyl [1-[(phenylmethoxy)carbonyl]cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (15 CITINGS) THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT OSC.G RE.CNT 22

- ANSWER 25 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2005:283298 CAPLUS AN
- DN
- Combinations of chlorpromazine compounds and antiproliferative drugs for the treatment of neoplasms
- Combinators, Incorporated, USA PCT Int. Appl., 65 pp. CODEN: PIXXOZ

	PAT	PATENT NO. WO 2005027842 WO 2005027842				KIND		DATE			APPLICATION NO.					DATE			
												2004-			2	0040	916		
			CN, GE, LK, NO, TJ, BW, AZ,	CO, GH, LR, NZ, TM, GH, BY,	CR, GM, LS, OM, TN, GM, KG,	CU, HR, LT, PG, TR, KE, KZ,	CZ HU, LU, PH, TT, LS, MD,	DE, ID, LV, PL, TZ, MW, RU,	DK, IL, MA, PT, UA, MZ, TJ,	DM, IN, MD, RO, UG, NA, TM,	DZ IS MG RU US SD AT	BG, EC, JP, MK, SC, UZ, SL, BE,	EE, KE, MN, SD, VC, SZ, BG,	EG, KG, MW, SE, VN, TZ, CH,	ES, KP, MX, SG, YU, UG, CY,	FI, KR, MZ, SK, ZA, ZM, CZ,	GB, KZ, NA, SL, ZM, ZW, DE,	GD, LC, NI, SY, ZW AM, DK,	
			SI,		TR,							, LU, GA,							
	ΑU	2004								AU 2004-273910				10					
								20060621					-2538570						
	EP	1670																	
		R:										, IT,							
	DD	2004										, TR, 2004-							
		1878										2004-							
JP 2007505914 MX 2006003066						т		2007	0315		JP	2006-	5270	24		2	0040	916	
						A		2006	0620		MX	2006-	3066			2006031			
	NO	2006	0013	25		A		2006	0606		NO	2006-	1325			2	0060	323	
		2007						2007			KR	2006-	7072	4.4		2	0060	414	
I		2003				P		2003											
	MO	2004	-US3	0368		W		2004	0916										

MARPAT 142:349042 AB The invention discloses a method for treating a patient having a cancer or other neoplasm by administering obligations or a chlorpromazine analog or other neoplasm by administering obligations or a chlorpromazine analog and an antiproliferative agent simultaneously or within 14 days of each other in amts. sufficient to treat the patient.

232925-18-7, Thymectacin

HR

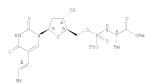
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (chloryromazine compound-antiproliferative drug antitumor combination)

232925-18-7 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) OSC.G 2

ANSWER 26 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

2005:120951 CAPLUS 142:219498 AN DN

Preparation of amino acid-containing nucleotide phosphoramidates as antitumor agents

McGuigan, Christopher

University College Cardiff Consultants Limited, UK PCT Int. Appl., 124 pp. CODEN: PIXXD2

															DATE				
PΙ	WO	2005012327 2005012327				A2		2005	0210										
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,										
								DE,											
								ID,											
								LV,											
								PL,											
								TZ,											
		RW:						MW,											
								RU,											
								GR,											
						BE,	BU,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	Pir,	NE,	
		0004		TD,				0005	0010		311 0	001	0614					70.0	
	AU	J 2004261455			A.I.			20050210			AU Z	004-		2	0040	720			
	CA	1646	110			7.2		20050210		CA 2004-2518115 EP 2004-743483						20040720			
	DI.							ES.											
		14.													THE P	OL,	110,	LI,	
	.TP	2006	IE, SI, FI, 528162													2	0040	720	
	NZ	5419	74			Δ		2009	0331		NZ 2	004-	5419	74		2	0040	720	
	NO	2005	0039	9.3		A		2005	1102		NO 2	005-	3993			2	0050	826	
	MX	5419 2005 2005	0126	06		A		2006	0208		MX 2	005-	1260	6		2	122		
	US	2006	0142	238		A1		2006	0629		US 2	005-	5608	87		2	0051	21.5	
PRAI	GB	2003	-170	0.9		A		2003	0721										
	WO	2004	-GB3	148		A		2004	0720										
OS	CA	SREAC'	T 14	2:21	9498	; MA	RPA1	142	:219	498									

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Amino acid—containing nucleotide phosphoranidates I, wherein R is alkyl, aryl, alkylaryl; R1 and R2 are independently H, alkyl, alkylaryl; R1 and R2 together form an alkylene chain so as to provide, together with the C atom to which they are attached, a cyclic system; Q is -O- and -GF-; X and Y are independently H, F, Cl, Br, T, OH and Me, Ar is a monocyclic aromatic rim moiety or a fused biocyclic or heterocyclic and is optionally in the real properties of the control of the c

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535958-60-2P
                            840505-87-5P
535958-53-3P
840505-88-6P
              840505-89-7P
                            840505-91-1P
840505-92-2P
              840505-93-3P
                            840505-94-4P
840505-95-5P
              840505-96-6P
                            840505-97-7P
840505-98-8P
                             840506-00-5P
              840505-99-9P
840506-01-69
              840506-02-7P
                             840506-03-8P
840506-04-99
              840506-05-0P
                             840506-06-19
840506-08-3P
              840506-09-4P
                             840506-10-7P
840506-11-8P
              840506-12-9P
                             840506-13-0P
840506-14-1P
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                             840506-16-3P
840506-17-4P
              840506-18-5P
                             840506-19-6P
840506-20-9P
              840506-21-0P
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              840506-31-2P
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840506-29-8P
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840506-77-6P
               840506-78-7P
                              840506-79-8P
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               840506-81-2P
                              840506-82-3P
840506-83-4P
               840506-85-6P
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840506-90-3P
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840506-93-6P
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                              840506-98-1P
840506-96-9P
840506-99-2P
                              840507-01-9P
840507-02-0P
                              840507-04-2P
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
   (preparation of amino acid-containing nucleotide phosphoramidates as antitumor
   agents)
232925-18-7 CAPLUS
L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-,
methyl ester (CA INDEX NAME)
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Absolute stereochemistry.
Double bond geometry as shown.

RN 436097-54-0 CAPLUS
CN L-Alanine. N-[5-[(1E)-2-bromoethenyl]-2-deoxy-P-phenyl-5-uridylyl]-,
phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 436097-55-1 CAPLUS
CN Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-2methyl-, methyl ester (9CI) (CA INDEX NAME)

436097-56-2 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl-, methyl ester (9C1) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

535958-46-4 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

535958-47-5 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

535958-53-3 CAPLUS

L=Tryptophan, N=[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

535958-60-2 CAPLUS Glycine, N-[5-[(1E)-2-bromoethenyl]-2-deoxy-P-phenyl-5-uridylyl]-, methyl ester (9C1) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840505-87-5 CAPLUS L-Alanine, N-(5-([1E]-2-bromoetheny1]-2-deoxy-P-(4-fluoropheny1)-5-uridy1y1-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

840505-88-6 CAPLUS RN

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-fluorophenyl)-5'-uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840505-89-7 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-fluorophenyl)-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

840505-91-1 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

840505-92-2 CAPLUS RN

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840505-93-3 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME) CN

Absolute stereochemistry. Double bond geometry as shown.

RN

NAMEL

RN 840505-95-5 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-[4-(trifluoromethyl)pheny1]-5'-uridyly1]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 840505-96-6 CAPLUS

N L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-[4-(trifluoromethyl)phenyl]-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 840505-97-7 CAPLUS

N L-Alanine, N-[5-[(1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

840505-98-8 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840505-99-9 CAPLUS Alanine, N-[5-[(IE)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-00-5 CAPLUS Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

840506-01-6 CAPLUS Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-02-7 CAPLUS Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-03-8 CAPLUS Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

840506-04-9 CAPLUS

Alanine, N-[5-[(1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

Alanine, N=[5=[(1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-06-1 CAPLUS Alanine, N=(5-[(1E)-2-bromoethenyl)-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl)-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

840506-08-3 CAPLUS

Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-[4-(trifluoromethyl)phenyl]-5'-uridylyl]-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-09-4 CAPLUS

Uridine, 5-[(1E]-2-bromoethenyl]-2'-deoxy-, 5'-[phenyl [1-(methoxycarbonyl)cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-10-7 CAPLUS Uridine, 5-[(18)-2-bromoethenyl]-2'-deoxy-, 5'-[phenyl [1-(ethoxycarbonyl)cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

840506-11-8 CAPLUS

Uridine, 5-[(1E)-2-bromoethenyl]-2'-deoxy-, 5'-[phenyl [1-[(phenylmethoxy)carbonyl]cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

840506-12-9 CAPLUS Uridine, 5-[(1E)-2-bromoetheny1]-2'-deoxy-, 5'-[4-nitropheny1 [1-(methoxycarbony1)cyclopenty1]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-13-0 CADLIS Uridine, 5-[(1E)-2-bromoethenyl]-2'-deoxy-, 5'-[4-nitrophenyl [1-(ethoxycarbonyl)cyclopentyl]phosphoramidate) (9C1) (CA INDEX NAME)

840506-14-1 CAPLUS

Uridine, 5-[(1E)-2-bromoethenyl]-2'-deoxy-, 5'-[4-nitrophenyl [1-[(phenylmethoxy)carbonyl]cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

840506-15-2 CAPLUS Uridine, 5-[(1E)-2-bromoetheny1]-2'-deoxy-, 5'-[4-fluoropheny1 [1-(methoxycarbonyl)cyclopenty1]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-16-3 CAPLUS Uridine, 5-[(IB-2-bromoethenyl]-2'-deoxy-, 5'-[4-fluorophenyl [1-(ethoxycarbonyl)cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

840506-17-4 CAPLUS

Uridine, 5-[(1E]-2-bromoethenyl]-2'-deoxy-, 5'-[4-fluorophenyl [1-[(phenylmethoxy)carbonyl]cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME 1

Absolute stereochemistry. Double bond geometry as shown.

RN

840506-18-5 CAPLUS Uridine, 5-[(1B)-2-bromoetheny1]-2'-deoxy-, 5'-[4-chloropheny1 [1-(methoxycarbonyl)cyclopenty1]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-19-6 CAPLUS Uridine, 5-[(IB-2-bromoethenyl]-2'-deoxy-, 5'-[4-chlorophenyl [1-(ethoxycarbonyl)cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

840506-20-9 CAPLUS Uridine, 5-[(1E)-2-promoethenyl]-2'-deoxy-, 5'-[4-chlorophenyl [1-[(phen/methoxyloarbonyl]cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME 1

Absolute stereochemistry. Double bond geometry as shown.

RN

840506-21-0 CAPLUS Uridine, 5-[(IE)-2-bromoethenyl]-2'-deoxy-, 5'-[4-(trifluoromethyl)phenyl [1-(methoxycarbonyl)cyclopentyl]phosphoranidate] (901) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-22-1 CAPLUS Uridine, 5-[[IE]-2-bromoethenyl]-2'-deoxy-, 5'-[4-(trifluoromethyl)phenyl [1-(ethoxycarbonyl)gyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

840506-23-2 CAPLUS

Uridine, 5-[(1E)-2-bromoethenyl]-2'-deoxy-, 5'-[4-(trifluoromethyl)phenyl [1-[(phenylmethoxy)carbonyl]cyclopentyl]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

840506-24-3 CAPLUS
L-Phenylalanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl], methyl ester (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

Double bond geometry as shown.

840506-25-4 CAPLUS L-Leudine, N-[5-[(1E)-2-bromoethenyl]-2*-deoxy-P-phenyl-5*-uridylyl]-, methyl ester (901) (CA INDEX NAME)

840506-26-5 CAPLUS

L-Leucine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-27-6 CAPLUS L-Leucine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

840506-28-7 CAPLUS L-Leucine, N-[5-([1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl|-, phenylmethyl ester (9CI) (CA INDEX NAME) CN

840506-29-8 CAPLUS RN L-Alanine, N-(2'-deoxy-2',2'-difluoro-P-phenyl-5'-cytidylyl)-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 840506-31-2 CAPLUS L-Alanine, N-[P-(4-chlorophenyl)-2'-deoxy-2',2'-difluoro-5'-cytidylyl]-, phenylmethyl ester (901) (CA INDEX NAME)

Absolute stereochemistry.

840506-32-3 CAPLUS Alanine, N=[P-(4=chloropheny1)-2'-deoxy-2',2'-difluoro-5'-cytidyly1]-2-methy1- phenylmethy1 ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

840506-69-6 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-P-(2-chlorophenyl)-2'-deoxy-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-70-9 CAPLUS

Alanine, N-[5-[(1E)-2-bromoethenyl]-P-(2-chlorophenyl)-2'-deoxy-5'-uridylyl]-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-73-2 CAPLUS L-Phenylalanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-74-3 CAPLUS

D-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

840506-75-4 CAPLUS

D-Alanine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-pheny1-5'-uridyly1]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-76-5 CAPLUS CN D-Alamine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-nitrophenyl)-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-77-6 CAPLUS Alanine, N-[5-((1E)-2-bromoethenyl)-2'-deoxy-P-[4-(trifluoromethyl)phenyl]-5'-uridylyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

Double bond geometry as shown.

840506-78-7 CAPLUS

Alanine, N-[5-((1E)-2-bromoethenyl]-2'-deoxy-P-[4-(trifluoromethyl)phenyl]-5'-uridylyl]-2-methyl-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

Alanine, N=[5=[(1E)-2-bromoetheny1]-2'-deoxy-P-(4-fluoropheny1)-5'-uridyly1]-2-methy1-, ethy1 ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-80-1 CAPLUS L-Phenylalanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-[4-(trifluoromethyl)phenyl]-5'-uridylyl]-, phenylmethyl ester (9GI) (CA INDEX NAME)

840506-81-2 CAPLUS

L-Leucine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-[4-(trifluoromethyl)phenyl]-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-82-3 CAPLUS Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-fluorophenyl)-5'-uridylyl-2-methyl-, methyl ester (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

Double bond geometry as shown.

840506-83-4 CAPLUS Alanine, N-[2'-deoxy-5-[(1E)-3-methoxy-3-oxo-1-propenyl]-P-(4-nitrophenyl)-5'-uridylyl]-2-methyl-, methyl ester (9CI) (CA INDEX NAME)

107560 883

RN 840506-85-6 CAPLUS
CN L-Methionine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-,
methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

Double bond geometry as snown.

RN 840506-86-7 CAPLUS
CN L-Methionine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 840506-87-8 CAPLUS
CN L-Isoleucine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-,
phenylmethyl ester (9CI) (CA INDEX NAME)

840506-88-9 CAPLUS

L-Isoleucine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-89-0 CAPLUS CN Glycine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-90-3 CAPLUS Glycine, N-[5-[(1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840506-91-4 CAPLUS

L-Valine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-[4-(trifluoromethyl)phenyl]-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-92-5 CAPLUS L-Aspartic acid, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, dimethyl ester (9C1) (CA INDEX NAME) CN

Absolute stereochemistry.

Double bond geometry as shown.

840506-93-6 CAPLUS

L-Glutamic acid, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, diethyl ester (9CI) (CA INDEX NAME)

840506-94-7 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-P-(3-chlorophenyl)-2'-deoxy-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

Alanine, N=[5=[(1E)-2-bromoethenyl]-P-(3-chlorophenyl)-2'-deoxy-5'-uridylyl]-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

840506-96-9 CAPLUS Alanine, N-(5-(1E)-2-bromoethenyl)-2'-deoxy-P-(4-fluorophenyl)-5'-uridylyl-2-methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

10/560 883

RN 840506-97-0 CAPLUS

N L-Valine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-pheny1-5'-uridyly1]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 840506-98-1 CAPLUS
CN L-Valine, N-[5-[(1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 840506-99-2 CAPLUS
CN L-Valine, N-[S-[(1E)-2-bromoethenyl]-2'-deoxy-P-(4-fluorophenyl)-5'uridylyl]-, phen/methyl ester (9CI) (CA INDEX NAME)

840507-00-8 CAPLUS RN

Uridine, 5-[(1E)-2-bromoetheny1]-2'-deoxy-, 5'-[pheny1 [2-oxo-1-pheny1-2-(pheny1methoxy)ethy1]phosphoramidate] (9CI) (CA INDEX NAME 1

Absolute stereochemistry.
Double bond geometry as shown.

RN

840507-01-9 CAPLUS Uridine, 5-[(1E)-2-bromoethenyl]-2'-deoxy-, 5'-[4-chlorophenyl [2-oxo-1-phenyl-2-(phenylmethoxy)ethyl]phosphoramidate] (9CI) (CA INDEX

Absolute stereochemistry. Double bond geometry as shown.

840507-02-0 CAPLUS Uridine, 5-[(1E]-2-bromoethenyl]-2'-deoxy-, 5'-[4-(trifluoromethyl)phenyl [2-oxo-1-phenyl-2-(phenylmethoxy)ethyl]phosphoramidate] (9CI) (CA INDEX NAME)

RN 840507-03-1 CAPLUS

 $L-Alanine, \ N-[5-[(1E)-2-bromoethenyl]-2"-deoxy-P-phenyl-5"-uridylyl]-,\\$ 2-methylpropyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

840507-04-2 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-,
1-methylpropyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

OSC.G THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 27 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2003:927328 CAPLUS AN
- 140:35079
- Development of novel anticancer agent targeting thymidylate synthase AU Nakata, Rieko
- Dep. Human Life Environ., Nara Women's Univ., Japan Kagak: to Kogyo (Tokyo, Japan) (2003), 56(11), 1260 CODEN: KAKTAP; ISSN: 0022-7684 Nippon Kagakkai CS
- DB
- Journal; General Review

10/560.887

Japanese

A review on the action mechanism and efficacy of NB 1011, a

phosphoramidate derivative of (E)-5-(2-bromoviny1)-dUMP.

232925-18-7, NB 1011

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (action mechanism and efficacy of antitumor drug NB 1011 targeting

thymidylate synthase) 232925-18-7 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

ANSWER 28 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2003:543256 CAPLUS

140:35438

NB1011 induces Ser15 phosphorylation of p53 and activates the G2/M checkpoint

ΑU Dellinger, Ryan W.; Karjian, Patricia L.; Neuteboom, Saskia T. C. CS

NewBiotics, Inc., San Diego, CA, USA Anti-Cancer Drugs (2003), 14(6), 449-455 CODEN: ANTDEV; ISSN: 0959-4973 so

PB. Lippincott Williams & Wilkins

Journal

English NB1011, a phosphoramidate derivative of (E)-5-(2-bromoviny1)-2'-deoxyuridine, is a novel anti-cancer agent that selectively targets tumor cells expressing high levels of thymidylate synthase (TS), an enzyme required for DNA biosynthesis. NB1011 treatment of high-TS-expressing breast carcinoma cells (MCF7TDX) results in the induction of p53 and p21 protein levels, whereas no p53 or p21 induction is observed in the low-TS-expressing MCF7 tumor cells. Furthermore, MCF7TDX cells accumulate in the G2/M phase of the cell cycle in response to NB1011. In this study, the effect of NB1011 on the phosphorylation status of p53 was analyzed. We demonstrate that NB1011 treatment of various tumor cell lines expressing high TS results in the phosphorylation of p53 on Ser15, whereas this p53 phosphorylation is not observed in low-TS-expressing tumor cells. Also, we examined the role of several key cell cycle regulators in the growth inhibition observed in response to NB1011. Our results show that the mRNA and protein levels of the G2/M regulators cdc2, cyclin Bl and cdc25C are down-regulated in MCF7TDX cells, while unaffected in MCF7 cells. The mRNA and protein levels of 14-3-30, also a direct transcriptional target of p53, are up-regulated in MCF7TDX cells following NB1011 treatment. while unchanged in MCF7 cells. Taken together, our data indicate that the growth inhibition caused by NB1011 in MCF7TDX cells is mediated through phosphorylation of p53 and activation of the G2/M checkpoint.

232925-18-7, NB1011 RL: DMA (Drug mechanism of action); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(NB1011 induces Ser15 phosphorylation of p53 and activates the G2/M checkpoint)

232925-18-7 CAPLUS

L-Alamine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

10/560.887

Absolute stereochemistry. Double bond geometry as shown.

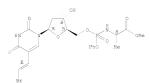
- OSC.G THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- ANSWER 29 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2003:522871 CAPLUS
- DN
- Kinetic properties of human thymidylate synthase, an anticancer drug target
- ΑU Sergeeva, Oksana A.; Khambatta, H. Godrej; Cathers, Brian E.; Sergeeva, Maria V
- CS
- NewBiotics, Inc., San Diego, CA, 92121, USA Biochemical and Biophysical Research Communications (2003), 307(2), SO 297_300 CODEN: BBRCA9: ISSN: 0006-291X
- Elsevier Science
- Journal
- English
- ăΒ The kinetic parameters of human recombinant thymidylate synthase (hrTS) were determined with its natural substrate, dUMP, and with
 - (E)-5-(2-bromoviny1)-2'-deoxyuridine monophosphate (BVdUMP), a nucleotide derivative believed to be the active species of the novel anticancer drug, NB 1011. NB 1011 is activated by hrTS and is selectively toxic to high TS-expressing tumor cells. Here, BVdUMP underwent hrTS-catalyzed SH group-dependent transformation and dUMP and BVdUMP acted as competitive
 - hrTS substrates. The natural folate cofactor, 5,10-methylenetetrahydrofolate, inhibited the TS-catalyzed reaction with BVdUMP. The authors suggest that lower folate levels found in tumor cells favor TS-catalyzed BVdUMP transformation, which, in addition to higher levels of TS expression in tumor cells, contributes to the favorable therapeutic
- index of the drug, NB 1011. 232925-18-7, NB 1011
 - RL: BSU (Biological study, unclassified); DMA (Drug mechanism of action); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (reaction kinetics of human thymidylate synthase, with bromovinyl-dUMP, the active species of anticancer drug NB 1011) 232925-18-7 CAPLUS
- RN
- L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD (5 CITINGS) OSC.G RE.CNT 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 30 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2003:515896 CAPLUS DN 140:64854
- Formulation development of a nucleotide phosphoramidate
- AU Natarajan, Gita; John, Elizabeth; Maniar, Manoj
- CS Formulation and Drug Delivery Group, BioSciences Division, SRI
- International, Menlo Park, CA, USA Pharmaceutical Technology (2003), 27(6), 66,68,70 SO CODEN: PTHEC9; ISSN: 1543-2521
- Advanstar Communications, Inc.
- Journal
- T.A English
- AB To develop a shelf-stable formulation of a cancer treatment under study, the authors evaluated 3 approaches: cosolvent systems, complexation, and micellar solubilization. Micellar solubilization with Polysorbate80 and cosurfactants was successful for developing a small-volume parenteral formulation for i.v. administration.
- 232925-18-7, NB1011 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (formulation development of nucleotide phosphoramidate)
- 232925-18-7 CAPLUS
- L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



- 232925-18-7DP, NB1011, complex with hydroxypropyl
 - β-cyclodextrin RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 - (formulation development of nucleotide phosphoramidate)
- 232925-18-7 CAPLUS
- L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 31 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 2003:455061 CAPLUS AN
- DN 139:7127
- - Preparation, cytotoxicity, antitumor, and antiinflammatory activities of nucleoside phosphoramidates
- Shepard, H. Michael; Vaino, Andrew Rein; Lehsten, Danielle M. PA USA
- SO U.S. Pat. Appl. Publ., 58 pp., Cont.-in-part of U.S. Ser. No. 782,721. CODEN: USXXCO
- English

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	EP					A3		20060524													
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		3	Ε,	FI,	CY																
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	US				B2		20091	.013													
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	US	1998-7	769	50P		P		19980	1305												
		1998-1				P		19981													
	US	1999-235961			A1		19990														
	US	2001-782721			A2		20010	1212													
	EP	1999-9	04:	195		A3		19990	1122												
		2000-5				A3		19990													
	US	2002-1	.19	927		A1		20020	1409												

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

os. MARPAT 139:7127

GI

This invention provides compds., compns. and methods for treating cancer, infectious disease, an autoimmune disorder or an inflammatory condition. Therapeutic compds. useful in the methods of this invention are 5'-phosphoramidatyl, 1,5-substituted pyrimidine compds. I, wherein and pharmaceutically acceptable salts thereof. Thus, I (R1 - CH:CHBr, R2 -OH, R3 = H, R4 = Me, R5 = Et) was prepared and tested for its cytotoxicity, antitumor, and antiinflammatory activities. Expression of thymidylate synthase in human normal tissues. The thymidylate synthase (TS) expression level in normal human tissues was examined in order to estimate the systemic toxicity of the compound(s) activated by thymidylate synthase. 322454-65-9P 436097-54-0P 535958-46-4P 535958-50-0P 535958-54-4P 535958-59-9P 535958-62-4P

535958-63-5P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES

(preparation cytotoxicity antitumor and antiinflammatory activities of nucleoside phosphoramidates) 322454-65-9 CAPLUS

L-Alanine, N-[5-(2-bromoethenyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

436097-54-0 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

535958-46-4 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

RN 535958-47-5 CAPLUS
CN L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 535958-48-6 CAPLUS
CN L-Alamine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-,
1-methylethyl ester [9CI] (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 535958-49-7 CAPLUS
CN L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-,
cyclopropylmethyl ester (9CI) (CA INDEX NAME)

535958-50-0 CAPLUS L-Alanine, N-[5-[(18)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, cyclohexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

535958-51-1 CAPLUS L-Alanine, N-[5-[(IE)-2-bromoethenyl]-2-deoxy-P-phenyl-5-uridylyl]-, cycloheptyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

535958-52-2 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-pheny1-5'-uridyly1]-, cyclooctyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 535958-53-3 CAPLUS
CN L-Tryptophan, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 535958-54-4 CAPLUS
CN L-Tryptophan, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 535958-55-5 CAPLUS
CN L-Tryptophan, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-,
cyclooctyl ester (9CI) (CA INDEX NAME)

CN

535958-57-7 CAPLUS L-Valine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

535958-58-8 CAPLUS L-Valine, N-[5-[(1E)-2-bromoethenyl]-2-deoxy-P-phenyl-5-uridylyl]-, 1,1-dimethylethyl ester (90I) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

535958-59-9 CAPLUS

L-Valine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, cyclohexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

CN

535958-60-2 CAPLUS Glydine, N-[5-[(IE)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

535958-61-3 CAPLUS

L-Histidine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, cyclohexyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

535958-62-4 CAPLUS L-Leucine, N-[5-[(1E)-2-bromoetheny1]-2'-deoxy-P-pheny1-5'-uridy1y1]-, cyclohexyl ester (9CI) (CA INDEX NAME)

535958-63-5 CAPLUS

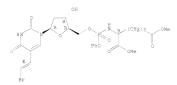
CN L-Phenylalanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, ethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

535958-64-6 CAPLUS

Uridine, 5-[(1E)-2-bromoethenvl]-2'-deoxv-, 5'-[phenvl [(1R)-5-methoxy-1-(methoxycarbony1)-5-oxopenty1]phosphoramidate] (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS) OSC.G

- ANSWER 32 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2003:302024 CAPLUS 139:117647 AN
- Synthesis of serine/alanine conjugated 3',5'-TpT
- ΑU
- Qin, Zhi-Hui; Lin, Chang-Xue; Ju, Yong; Zhao, Yu-Fen Bioorganic Phosphorus Chemistry Laboratory, Department of Chemistry, School of Life Science and Engineering, Tsinghua University, Beijing, 100084, Peop. Rep. China
- Nucleosides, Nucleotides & Nucleic Acids (2003), 22(1), 63-69

CODEN: NNNAFY; ISSN: 1525-7770

Marcel Dekker, Inc.

LA English

CASREACT 139:117647 Serine and alanine phosphoramidate conjugates of 3',5'-TpT were

synthesized. The corresponding serine phosphoramidate possesses some unique properties due to the presence of the side chain hydroxyl group.

548775-55-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) (synthesis of serine/alanine conjugated 3',5'-TpT via oxidative

coupling of the dinucleotide phosphonate with L-amino acid Me esters) 548775-55-9 CAPLUS

Thymidine, P-deoxy-P-[[(1S)-1-(hydroxymethyl)-2-methoxy-2-oxoethyl]amino]thymidylyl-(3'-5')-, 3'-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

548775-54-8P

RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of serine/alanine conjugated 3',5'-TpT via oxidative coupling of the dinucleotide phosphonate with L-amino acid Me esters) RN 548775-54-8 CAPLUS Thymidine, P-deoxy-P-[[(1S)-2-methoxy-1-methyl-2-oxoethyl]amino]thymidylyl-(3'-5')-, 3'-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OSC.G THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT RE.CNT 7

ANSWER 33 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2003:164629 CAPLUS 139:190589

DN

Cellular transformation of the investigational new anticancer drug NB1011, a phosphoramidate of 5-(2-bromoviny1)-2'-deoxyuridine, results in

modification of cellular proteins not DNA Sergeeva, Maria V.; Cathers, Brian E.

AU NewBiotics, Inc., San Diego, CA, 92121, USA

10/560.887

Biochemical Pharmacology (2003), 65(5), 823-831

CODEN: BCPCA6; ISSN: 0006-2952

Elsevier Science Inc.

LA English

AB NB1011 [E-5-(2-bromovinyl)-2'-deoxyuridine-5'-(1-methylalanyl)-

phenylphosphoramidate], a phosphoramidate prodrug of E-5-(2-bromoviny1)-2'-deoxyuridine-5'-monophosphate (BVdUMP), is an investigational new anticancer drug. NB1011 targets thymidylate synthase (TS), which catalyzes the transformation of BVdUMP into cytotoxic reaction products. Due to the elevated levels of TS expression in tumor cells compared to normal cells, these cytotoxic products are preferentially generated inside tumor cells, and, as expected, NB1011 is more toxic to cells with higher levels of TS expression. Therefore, NB1011 therapy should kill tumor cells without severely damaging normal cells. Radiolabeled NB1011 was used to determine the intracellular fate of NB1011 reaction products and, possibly, the mechanism of action of this investigational new drug. We found significant incorporation of the radiolabel into cellular macromols. In contrast to our expectations that NB1011 product(s) would be incorporated into DNA, we discovered that cellular proteins were the labeled macromol. fraction. Herein, we report that the intracellular transformation of NB1011 involves formation of the corresponding monophosphate, TS-dependent transformation into highly reactive intermediates, and subsequent incorporation into cellular proteins. TS itself appears to escape irreversible inactivation. Our data suggest that protein modification not DNA incorporation accounts for the therapeutic effect of NB1011. The proposed mechanism is rather unexpected for a nucleotide analog and could lead to the discovery of new cellular protein targets for future drug design. 232925-18-7, NB1011

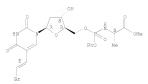
RL: DMA (Drug mechanism of action); PKT (Pharmacokinetics); BIOL (Biological study)

(cellular transformation of thymidylate synthase inhibitor anticancer drug NB1011, a phosphoramidate of 5-(2-bromoviny1)-2'-deoxyuridine, results in modification of cellular proteins not DNA) 232925-18-7 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.



THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS) RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 34 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN AN 2003:54370 CAPLUS

DN 139:316719

Nucleoside transport inhibitors, dipyridamole and

p-nitrobenzylthioinosine, selectively potentiate the antitumor activity of NB1011 [Erratum to document cited in CA138:248065]

Boyer, Christopher R.; Karjian, Paticia L.; Wahl, Geoffrey M.; Pegram, Mark: Neuteboom, Saskia T. C.

New Biotics, Inc., San Diego, CA, 92121, USA

Anti-Cancer Drugs (2002), 13(10), 1077 CODEN: ANTDEV; ISSN: 0959-4973

Lippincott Williams & Wilkins

10/560.887

- English AB

In the Results section, the second sentence should read: "The median-effect/combination index method by Chou and Talalay was used to calculate CI values.*. The third sentence should read: "CI values < 1 indicate synergy, CI - 1 indicates additivity and CI > 1 indicates

antagonism.". 232925-18-7, NB1011

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dipyridamole and nitrobenzylthioinosine potentiate antitumor activity

of NB1011 (Erratum)) 232925-18-7 CAPLUS

L-Alanine, N-[5-[(IE)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

- ANSWER 35 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2002:849374 CAPLUS AN
- - Viral enzyme activated prototoxophores and use of same to treat viral
 - Cathers, Brian E.; Neuteboom, Saskia T. C.; Shepard, H. Michael
 - Newbiotics, Inc., USA PCT Int. Appl., 66 pp. PA SO
 - CODEN: PIXXD2
- Patent
- English

	PATENT NO.					KIN		DATE			APPL	ICAT						
PI	WO	2002		A2		20021107			WO 2			20020426						
	WO 2002					A9		20040408										
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			CO,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	ES,	FI,	GB,	GD,	GE,	GH,
			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,
			LS,	LT.	LU.	LV.	MA.	MD,	MG.	MK.	MN.	MW.	MX,	MZ.	NO.	NZ,	OM.	PH,
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TN,	TR,	TT,	TZ,
			UA,	UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW							
		RW:	GH,	GM,	KE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	AZ,	BY,
			KG,	KZ,	MD,	RU,	TJ.	TM,	AT,	BE,	CH,	CY,	DE,	DK,	ES,	FI,	FR.	GB,
			GR,	IE,	IT,	LU,	MC,	NL,	PT,	SE,	TR,	BF,	BJ,	CF,	CG,	CI,	CM,	GA,
			GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG							
	AU 2002308479				A1		2002	1111	AU 2002-308479						0020	426		
	US 20030114385			A1		2003	0619		US 2	002-	2-133133			2	0020	426		
PRAI	US	2001	-286	893P		P		2001	0427									
	WO	2002	-US1	3223		W		2002	0426									

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OS MARPAT 137:375228

A synthetic prototoxophore, which is a relatively non-toxic compound that includes a toxin moiety and a substrate domain for a viral enzyme, is provided. Upon binding of a viral enzyme to the substrate domain, the catalytic activity of the viral enzyme converts the prototoxophore to a toxophore, which is toxic to a cell. Thus, a toxophore also is provided, as is a pharmaceutical composition containing a prototoxophore, and kits containing a prototoxophore. Also provided are methods of using a prototoxophore to reduce or inhibit viral infectivity, and methods of using a prototoxophore to ameliorate the severity of a viral infection in an individual. 474317-98-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (viral enzyme-activated prototoxophores to treat viral infections) 474317-98-1 CAPLUS

Alanine, N-[5-(2-bromoethenyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

- ANSWER 36 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 2002:813406 CAPLUS 1.4
- AN
- 139:65584
- Electrospray ionization mass spectrometry of serine/alanine conjugated 5'-UMP and 3',5'-dithymidine phosphoramidates
- ATT Qin, Zhi-Hui; Lin, Chang-Xue; Chen, Yi; Ju, Yong; Zhao, Yu-Fen CS
- Biooeg. Phosphorus Chem. Lab., Dep. of Chem., School of Life Sci. and Eng., Tsinghua Univ., Beljing, 100084, Peop. Rep. China Rapid Communications in Mass Spectrometry (2002), 16(20), 1997-2002 80
- CODEN: RCMSEF; ISSN: 0951-4198 John Wiley & Sons Ltd.
- Journal.
- LA English

RN

- The structures of serine and alanine phosphoramidates of uridine and 3',5'-dithymidine were studied using pos. ion electrospray ionization mass spectrometry in conjunction with tandem mass spectrometry, and the proposed fragmentation pathways are reported. Besides the common elimination fragmentation pathway, ions originating from intramol. substitutions and rearrangements were observed for the serine phosphoramidate conjugates, reflecting the presence of the side-chain hydroxyl group. This behavior can be rationalized in terms of an attack of the hydroxyl group on the phosphorus atom with the aid of the sodium ion, to form a cyclic pentacoordinated phosphorane intermediate. 548775-54-8 548775-55-9
- RL: ANT (Analyte); ANST (Analytical study)

(electrospray ionization mass spectrometry of serine/alanine conjugated 5'-UMP and 3',5'-dithymidine phosphoramidates) 548775-54-8 CAPLUS

Thymidine, P-deoxy-P-[[(18)-2-methoxy-1-methyl-2-oxoethyl]amino]thymidylyl-(3'→5')-, 3'-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/560.887

548775-55-9 CAPLUS

Thymidine, P-deoxy-P-[[(1S)-1-(hydroxymethyl)-2-methoxy-2oxoethyl]amino]thymidylyl-(3 +5')-, 3'-acetate (9CI) (CA INDEX

Absolute stereochemistry.

OSC.G THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 37 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1.4

AN 2002:694508 CAPLUS

DN 138:248065

Nucleoside transport inhibitors, dipyridamole and p-nitrobenzylthioinosine, selectively potentiate the antitumor activity of AU Boyer, Christopher R.; Kartian, Patricia L.; Wahl, Geoffrey M.; Pegram,

Mark; Neuteboom, Saskia T. C CS

NewBiotics, Inc, San Diego, CA, 92121, USA Anti-Cancer Drugs (2002), 13(1), 29-36 80

CODEN: ANTDEV; ISSN: 0959-4973

Lippincott Williams & Wilkins PB

LA English NBÍ011, a novel anticancer agent, targets tumor cells expressing high levels of thymidylate synthase (TS). NB1011 is converted intracellularly to bromovinyldeoxyuridine monophosphate (BVdUMP) which competes with the natural substrate, deoxyuridine monophosphate, for binding to TS. Unlike inhibitors, NB1011 becomes a reversible substrate for TS catalysis. Thus, TS retains activity and converts BVdUMP into cytotoxic product(s). vitro cytotoxicity studies demonstrate NB1011's preferential activity against tumor cells expressing elevated TS protein levels. Addnl., NB1011 has antitumor activity in vivo. To identify drugs which interact synergistically with NB1011, we screened 13 combinations of chemotherspectic agents with NB1011 in human tumon and normal cells. Dipyridamole and p-nitrobenzylthioinosine (NEMPR), potent inhibitors of equilibrative nucleoside transport, synergized with NB1011 selectively against 5-fluorouracil (5-FU)-resistant H630R10 colon carcinoma cells [combination index (CI)-0.75 and 0.35] and Tomudex-resistant MCF7TDX breast carcinoma cells (CI=0.51 and 0.57), both TS overexpressing cell lines. These agents produced no synergy with NB1011 in Det551 and CCD18co normal cells (CI > 1.1) lacking TS overexpression. Dipyridamole potentiated NB1011's cytotoxicity in medium lacking nucleosides and bases, suggesting a non-salvage-dependent mechanism. We demonstrate that nucleoside transport inhibitors, dipyridamole and NBMPR, show promise for clin. efficacious combination with NB1011.

232925-18-7, NB1011 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(dipyridamole and nitrobenzylthioinosine potentiate antitumor activity

232925-18-7 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

osc.g THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS) RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 38 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2002:688830 CAPLUS AN
- DN
- An Improved Procedure for the Synthesis of Nucleoside Phosphoramidates
- Lenster, Danielle M.; Baehr, David N.; Lobi, Thomas J.; Valno, Andrew R. NewBlotics Inc., San Diego, CA, 32121, USA Organic Process Research & Development (2002), 6(6), 819-822
- SO
- CODEN: OPRDFK; ISSN: 1083-6160 American Chemical Society
- LA English
- os CASREACT 137:295185

- AB Nucleoside phosphoramidates, e.g. I, provide an elegant means to permit cellular absorption of masked phosphate esters, and, by doing so, remove any dependence of the biol, response on nucleoside kinase activity. The present report details a means to synthesize nucleoside phosphoramidates on a multi-pound scale with a high (>99%) degree of purity, suitable for use in human clin. trials. 232925-18-7P
- RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)
 - (multi-pound scale synthesis of nucleoside phosphoramidates via condensation of alanine with Ph phosphorodichloridate)
- 232925-18-7 CAPLUS
- L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) OSC.G THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 17 ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 39 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
    2002:675850 CAPLUS
AN
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DN 137:210903

Use of 5-substituted nucleosides and/or prodrugs thereof in combination preparations for the resistance-free treatment of infectious diseases

Fahrig, Rudolf Hinrich Hermann; Sonntag, Denise

PA Resprotect G.m.b.H., Germany PCT Int. Appl., 26 pp. CODEN: PIXXD2 SO

Patent

German

FAN.CNT 1

I ALA	PA	CENT :						DATE			APPL	ICAT	ION	NO.		DATE				
PI	WO	2002067951 2002067951			A2					WO 2002-EP1890						20020222				
	W		CO, GM, LS, PL,	CR, HR, LT,	CU, HU, LU, RO,	CZ, ID, LV, RU,	DE IL MA SD	IN, MD, SE,	DM, IS, MG, SG,	DZ, JP, MK, SI,	EC, KE, MN, SK,	EE KG MW SL	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE LK OM	GH, LR, PH,		
		RW:	GH, CY,	GM, DE,	KE, DK,	LS, ES,	MW. FI	MZ, FR, CM,	SD, GB,	SL, GR,	SZ,	IT,	LU,	MC,	NL,	PT,	SE,	TR,		
	DE	1010						20020912						20010223						
	AU	2002	002234644 868040 868040					2002	0912		AU 2	002-	2346	44		2	0020	222		
									20031210											
	EP	1368						20060705								-				
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,		
			IE,	SI,	LT,	LV,	FI,	RO,	MK,	CY,	AL,	TR								
		2004									JP 2	002-	5673	17		2	0020	222		
	JP	4194	366			B2		2008	1210											
		3321												91			0020			
		2004						2004			US 2	004-	4680	17		20040204				
		7122				B2		2006												
PRAI		2001																		
	WO 2002-EP1890 W																			
AB	The	e inv	enti	on d	iscl	oses	the	use	of	5-su	bsti	tute	d nu	cleo	side	s an	d/or			

- prodrugs thereof together with at least one active substance in order to produce a medicament or combination preparation used in the resistance-free treatment of infectious diseases caused by bacteria or protozoa. 232925-18-7
- RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (nucleoside 5-substituted derivs. and/or prodrugs in combination prepns. for resistance-free treatment of infectious disease)
- 232925-18-7 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME) RN

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 1 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 40 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2002:555307 CAPLUS

Methods using pyrimidine derivatives and furanopyrimidone derivatives to treat autoimmune and inflammatory conditions

Shepard, H. Michael

SO

Newbiotics, Inc., USA PCT Int. Appl., 65 pp. CODEN: PIXXD2

Patent

LA English

FAN.CNT 1 PATENT NO.								DATE			APPL	ICAT		DATE				
PI	WO	2002056832				A2					WO 2	002-		20020118				
		W:	CO, GM, LS, PL,	CR, HR, LT, PT,	CU, HU, LU, RO,	CZ, ID, LV, RU,	DE IL MA SD	IN,	DM, IS, MG, SG,	DZ, JP, MK, SI,	EC, KE, MN, SK,	EE KG MW SL	ES, KP, MX,	FI, KR, MZ,	GB, KZ, NO,	GD, LC, NZ,	GE LK OM	GH, LR, PH,
		RW:	GH, CY,	GM, DE,	KE, DK,	LS, ES,	MW, FI,	MZ, FR,	SD, GB,	SL, GR,	SZ, IE,	IT,	LU,	MC,	NL,	PT,	SE.	TR,
	AU	2002									CA 2	002-	2441		2	118		
	US	2002241911 20020151519 7138388				A1		2002	1017		US 2	002-	5132	0		2	118	
	EP	1359 R:	AT,	BE,	CH,	DE,	DK,	2003 ES,	FR,	GB,	GR,	IT,						
PRAI	US	IE, SI, L 20070213307 2001-262849P 2002-51320				A1 P		2007	0913 0119				5164	57		2	0060	905
	110	0000	7707	200		**		0000										

WO 2002-US1361 W 20020118 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

The invention provides methods for treating inflammatory or autoimmune diseases by contacting the affected cell or tissue with a therapeutic compound Such pathologies include, but are not limited to, rheumatoid arthritis, systemic lupus erythematosus, psoriatic arthritis, reactive arthritis, Crohn's disease, ulcerative colitis, and scleroderma.
Therapeutic compds. useful in the methods of this invention are selected from 1,5-substituted pyrimidine derivs. and analogs and substituted

furanopyrimidone analogs. Compound preparation is included.

322454-10-4 322454-15-9 1101046-45-0 322454-32-0

1101046-49-4 1101046-50-7 1101046-51-8 1101046-53-0

RL: PRPH (Prophetic)

(Methods using pyrimidine derivatives and furanopyrimidone derivatives to treat autoimmune and inflammatory conditions)

RN 322454-08-0 CAPLUS

L-Alanine, N-[2'-deoxy-P-phenyl-5-[(trimethylsilyl)ethynyl]-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Measi-c=c

322454-10-4 CAPLUS L-Alanine, N-(2'-deoxy-5-ethynyl-P-phenyl-5'-uridylyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

322454-15-9 CAPLUS

L-Alanine, N-[5-[(1E,3E)-4-bromo-1,3-butadienyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

322454-32-0 CAPLUS

L-Alamine, N=[5-(1-decynyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

322454-35-3 CAPLUS L-Alanine, N-(\alpha, \alpha - \text{trifluoro-P-phenyl-5'-thymidylyl})-, methyl ester (9CI) (CA INDEX NAME) CN

Absolute stereochemistry.

1101046-45-0 CAPLUS INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry.
Double bond geometry unknown.

1101046-49-4 CAPLUS INDEX NAME NOT YET ASSIGNED CN Absolute stereochemistry.
Double bond geometry as shown.

RN

1101046-50-7 CAPLUS

INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry. Double bond geometry unknown.

RN 1101046-51-8 CAPLUS

INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry. Double bond geometry unknown.

RN 1101046-53-0 CAPLUS

INDEX NAME NOT YET ASSIGNED

Absolute stereochemistry. Double bond geometry unknown.

322454-65-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pyrimidine derivs. and furanopyrimidone derivs., for treatment of autoimmune and inflammatory conditions) 322454-65-9 CAPLUS

L-Alanine, N-[5-(2-bromoethenyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 1 ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 41 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

AN 2002:391469 CAPLUS

DN 136:386347

Preparation of synergistic enzyme catalyzed therapeutic activation (ECTA) nucleosides as antitumor agents

Shepard, H. Michael; Boyer, Christopher PA

Newbiotics, Inc., USA PCT Int. Appl., 72 pp. SO

CODEN: PIXXD2

Patent

English LA

FAN.	CNT	1																		
	PATENT NO.						D	DATE			APPL	ICAT.	DATE							
PI	WO	2002	0399	52		A2		20020523			W0 2			20011116						
	WO	2002	2002039952			A.3		20021010												
		W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BY,	BZ,	CA,	CH,	CN,		
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			GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,	LK,	LR,		
			LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NO,	NZ,	OM,	PH,		
			PL,	PT,	RO,	RU,	SD,	SE,	SG,	SI,	SK,	SL,	TJ,	TM,	TR,	TT,	TZ,	UA,		
			UG,	US,	UZ,	VN,	YU,	ZA,	ZM,	ZW										
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			BF,	BJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	NE,	SN,	TD,	TG		
	AU	2002036455				A		2002	0527		AU 2	002-	3645	5		2	0011	116		
	US	20020147175				A1		20021010			US 2	001-	9907	99		2	0011:	116		
PRAI	US	2000	-249	722P		P		2000	1116											
	WO	2001	-US4	3566		W		2001	1116											

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT This invention provides compns. containing an effective amount of a novel substrate compound that selectively inhibit the proliferation of hyper-proliferative cells, for example, pathol. cells that endogenously over-express a target enzyme that confers resistance to biol. and chemo-therapeutic agents and an effective amount of a nucleoside transport antagonistic agents. Further provided by this invention is a method for treating a subject by delivering to the subject the composition as described herein. The compns. of this invention may be used alone or in combination with other chemo-therapeutics or alternative anti-cancer therapies such as radiation. Thus, (E)-5-(2-bromovinyl)-2'-deoxy-5'-uridyl Ph L-alaninylphosphoramidate (I) was prepared and tested in vitro human cells as synergistic antitumor agent. Vinblastine and doxorubicin showed potential synergy (CI < 1.1) with I in MCF7TDX and H630R10 cell. Irinotecan and taxol showed an additive or antagonistic interaction (CI = 1-1.4). The most antagonistic interaction was observed with 5-fluorouracil which gave CI = 3.19 in MCF7TDX cells. In light of these results, vinblastine and doxorubicin were chosen for further study.

322454-65-9P RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

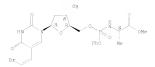
(preparation of synergistic enzyme catalyzed therapeutic activation nucleosides as antitumor agents)

322454-65~9 CAPLUS

L-Alamine, N-[5-(2-bromoethenyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

10/560.887

Absolute stereochemistry. Double bond geometry unknown.



osc.g 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- ANSWER 42 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 2002:328912 CAPLUS
- Inhibition of cell growth by NB1011 requires high thymidylate synthase levels and correlates with p53, p21, Bax, and GADD45 induction
- Neuteboom, Saskia T. C.; Karjian, Patricia L.; Boyer, Christopher R.; AU Beryt, Malgorzhata; Pegram, Mark; Wahl, Geoffrey M.; Shepard, H. Michael NewBlotics, Inc., San Diego, CA, 92121, USA Molecular Cancer Therapeutics (2002), 1(6), 377-384
- CS
- so CODEN: MCTOCF; ISSN: 1535-7163
- American Association for Cancer Research
- T.A English
- NB1011, a phosphoramidate derivative of (E)-5-(2-bromovinyl)-2'-deoxyuridine, is a novel small mol. anticancer agent. NB1011 is selectively active against tumor cells expressing high levels of thymidylate synthase (TS), a critical enzyme in DNA biosynthesis. NB1011 is different from the current TS-targeted drugs, which require inhibition of TS to be effective, because NB1011 cytotoxicity depends upon activation by TS. Here we report a dose-dependent, antitumor activity of NB1011 against established Tomudex-resistant breast cancer (MCF7TDX) xenografts in athymic mice.

 Against 5-fluorouracil-resistant colon carcinoma (H63OR10) xenografts. NB1011 was as efficacious as irinotecan, a drug recently approved for the treatment of 5-fluorouracil-resistant colon cancer. To gain insight into the mechanisms NB1011 uses to suppress cellular growth, we analyzed the downstream mol. events in the high TS-expressing MCFTTDX and RKOTDX cell lines upon NB1011 treatment. NB1011 treatment increased the mRNA levels of p21, Bax, and GADD45. Furthermore, NB1011 induced p53, p21, and BAD proteins specifically in high TS-expressing tumor cells, whereas no induction was observed in low TS-expressing tumor cells (MCF7) or normal cells (WI38). Cell cycle anal. demonstrated that NB1011 treatment of MCF7TDX and RKOTDX cells resulted in an accumulation of cells in the G2-M phase of the cell cycle. Altogether, our data indicate that the induction of the p53 target genes p21, bax, and GADD45, with a concomitant deregulation of the cell cycle, may represent one of the mechanisms by which NB1011 exerts its growth-suppressive effects.
- 232925-18-7, NB1011 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
- (inhibition of cell growth by NB1011 requires high thymidylate synthase levels and correlates with p53, p21, Bax, and GADD45 induction) RN
- 232925-18-7 CAPLUS L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS) OSC.G RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 43 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

2002:153907 CAPLUS

137:27792

Synthesis and antiviral evaluation of phosphoramidate derivatives of (E)-5-(2-bromoviny1)-2-deoxyuridine

ΑU Harris, S. A.; McGuigan, C.; Andrei, G.; Snoeck, R.; De Clercq, E.;

Welsh School of Pharmacy, Cardiff University, Cardiff, UK Antiviral Chemistry & Chemotherapy (2001), 12(5), 293-300

CODEN: ACCHEH; ISSN: 0956-3202 International Medical Press

LA English

CASREACT 137:27792 We report the design, synthesis and antiviral evaluation of a number of lipophilic, masked phosphoramidate derivs. of the antiherpetic agent (E)-5-(2-bromoviny1)-2'-deoxyuridine (BVDU), designed to act as membrane soluble prodrugs of the free nucleotide. The phosphoramidate derivs. of BVDU that contain L-alanine exhibited potent anti herpes simplex virus type 1 and varicella-zoster virus activity but lost marked activity against thymidine kinase-deficient virus strains. The phosphoramidate derivative bearing the amino acid a, a-dimethylglycine showed poor activity in all cell lines tested. It appears that successful kinase bypass by phosphoramidates is highly dependent on the nucleoside analog, amino acid and ester structure, as well as the cell line to which the drugs are exposed.

232925-18-7P 436097-54-0P 436097-55-1P RI: PAC (Pharmacological activity); PRP (Properties); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (synthesis and antiviral evaluation of phosphoramidate derivs. of

(E)-5-(2-bromoviny1)-2'-deoxyuridine)

232925-18-7 CAPLUS Absolute stereochemistry.

Double bond geometry as shown.

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

436097-54-0 CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

 $\begin{array}{lll} 436097-55-1 & CAPLUS \\ Alanine, & N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-2- \end{array}$ methyl-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

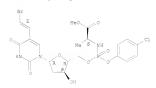
436097-56-2P

RL: PAC (Pharmacological activity); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(synthesis and antiviral evaluation of phosphoramidate derivs. of (E)-5-(2-bromovinyl)-2'-deoxyuridine) 436097-56-2 CAPLUS

RN L-Alanine, N=[5-[(1E)-2-bromoethenyl]-P-(4-chlorophenyl)-2'-deoxy-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.



OSC.G 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS) BE CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 44 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN AN

2001:167005 CAPLUS

- A novel approach to thymidylate synthase as a target for cancer
- ΑU Li, Qing; Boyer, Christopher; Lee, Jean Y.; Shepard, H. Michael NewBiotics, Inc., San Diego, CA, USA Molecular Pharmacology (2001), 59(3), 446-452

CODEN: MOPMA3; ISSN: 0026-895X

American Society for Pharmacology and Experimental Therapeutics

- AB.
- English Tumor cell resistance to fluoropyrimidiness and other inhibitors of thymidylate synthase (TS) is a serious problem often associated with increased intracellular TS. Clin., another problem that arises from the use of TS inhibitors is toxicity, which develops, in part, because normal cells may be adversely affected by doses of inhibitor that do not impact tumor cells. To circumvent this problem, we have devised a new strategy called enzyme-catalyzed therapeutic activation (ECTA), which takes advantage of overexpressed TS to enzymically generate cytotoxic moieties preferentially in tumor cells. We show herein that tumor cells expressing elevated levels of TS are preferentially sensitive to NB1011, a phosphoramidate derivative of (E)-5-(2-bromovinyl)-2 -deoxyuridine. We find support for the proposed mechanism of NB1011 in the following results: (1) pos. relationship between TS protein level and sensitivity to NB1011 in engineered HT1080 tumor cells, designed to express defined levels of TS protein; (2) NB1011 activity is enhanced on tumor cells which express endogenous elevated TS; (3) cytotoxicity of NB1011 is blocked by raltitrexed (Tomudex); (4) NB1011 selection of TS-overexpressing MCF7TDX tumor cells results in recovery of cell populations and clones with diminished TS levels and restored sensitivity to raltitrexed. A preliminary comparison of TS mRNA levels in multiple normal tissues vs. colon tumor samples suggests that selective tumor cytotoxicity of NB1011 may be possible in the clin. setting. Because NB1011 cytotoxicity is dependent upon activation by TS, its proposed mechanism of action is distinct from current TS-targeted drugs, which require inhibition of TS to he effective.
 - 232925-18-7, NB1011
 - RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Hapa)
 - (a novel approach to thymidylate synthase as a target for cancer chemotherapy)
- 232925-18-7 CAPLUS RN
- L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry

Double bond geometry as shown.

osc.G THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS) RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 45 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

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10/560.887
    2001:78399 CAPLUS
     134:141727
     Enzyme-catalyzed therapeutic activation, tetrahydropyrimidine derivative
     prodrugs, and preparation and antitumor activity thereof
TN
     Shepard, H. Michael; Chan, Ming Fai; Groziak, Michael P.
     Newbiotics, Inc., USA
    PCT Int. Appl., 106 pp.
     CODEN: PIXXD2
T.A
FAN.CNT 1
    PATENT NO.
                       KIND DATE
                                             APPLICATION NO
                                                                      DATE
    WO 2001007454
                                 20010201
                                             WO 2000-US20008
                                                                      20000721
                          A1.
         W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
             DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS,
             JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,
             MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
             TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
             DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,
             CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
                                 20010201
                                              CA 2000-2379988
     CA 2379988
                          A1
                                 20010213
     AU 2000062319
                          A
                                             AU 2000-62319
                               20040805
     AU 775601
                           B2
     EP 1200455
                          Δ1
                                 20020502
                                             EP 2000-948886
                                                                      20000721
     EP 1200455
                           B1
                                 20090422
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL
     JP 2003505466
                                20030212
                                              JP 2001-512538
    BR 2000012677
                                 20030701
                                              BR 2000-12677
                                              AT 2000-948886
    AT 429438
     IIS 6683061
                          B1
                               20040127
                                              US 2001-856127
                                                                      20011010
     MX 2002000763
                         A
Al
                                 20020812
                                              MX 2002-763
     US 20040077588
                                              US 2003-681418
                                                                      20031007
                                20091020
     US 7605144
                          В2
PRAI US 1999-145356P
                          P
     US 1999-145437P
                                 19990723
     US 2000-191315P
                                 20000321
     WO 2000-TIS20008
                         W
     US 2001-856127
                         A1
                               20011010
ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT
   MARPAT 134:141727
    Substrate compds. are provided that selectively inhibit the proliferation
     of pathol. cells, e.g. pathol. cells that endogenously overexpress a
target enzyme that confers resistance to biol. and chemotherapeutic
    agents. The enzyme acts on a substrate compound to (1) convert it to a
     cellular toxin and/or (2) release a toxic byproduct. In one embodiment,
     the activity of the target enzyme has been greatly enhanced in a target
     cell as a result of loss of tumor suppressor function and/or selection
     resulting from previous exposure to chemotherapy. In another embodiment,
     the pathol. cell contains a target enzyme that is an expression product of
     an infectious agent in the cell. Further provided is a method for treating a subject by delivering to the subject a prodrug as described
     herein. The prodrugs of the invention may be used alone or in combination
     with other chemotherapeutics or alternative anti-cancer therapies such as
     radiation.
                 Preparation of deoxyuridine derivs. is described.
     322454-65-9P
     RL: BAC (Biological activity or effector, except adverse); BSU (Biological
     study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);
     BIOL (Biological study); PREP (Preparation); USES (Uses)
        (enzyme-catalyzed therapeutic activation, tetrahydropyrimidine derivative
        prodrugs, and preparation and antitumor activity)
    322454-65-9 CAPLUS L-Alanine, N-[5-(2-bromoethenyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9C1) (CA INDEX NAME)
DAT
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Absolute stereochemistry.
Double bond geometry unknown.

322453-87-2D, halo and cyano derivs. 322453-88-3 322453-90-7D, halo and cyano derivs. 322453-92-9 322453-93-0D, halo 322453-89-4 322453-91-8 Lvs. 322453-94-1 322 322454-00-2 322454-02-4 and cyano derivs. 322453-98-5 322 322453-96-3 322454-02-4D, analogs 322454-04-6 322454-04-6D, analogs 322454-08-0 322454-10-4D, analogs 322454-15-9 322454-19-3 322454-23-9D, analogs 322454-26-2D, analogs 322454-29-5 322454-29-5D, analogs 322454-32-0 322454-35-3 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(Uses)
(enzyme-catalyzed therapeutic activation, tetrahydropyrimidine derivative

prodrugs, and preparation and antitumor activity)
RN 322453-87-2 CAPLUS
CN 1-Alamine, N-[5-(1,3-butadienyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9C1) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry unknown.

RN 322453-88-3 CAPLUS

E. Alamine, N=[5-(4-chloro-1,3-butadienyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

10/560 883

RN 322453-89-4 CAPLUS

N L-Alanine, N-[5-(4-bromo-1,3-butadienyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry unknown.

RN 322453-90-7 CAPLUS

L-Alanine, N-[2'-deoxy-5-[(1E)-3-(diethylamino)-1-propenyl]-P-phenyl-5'uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 322453-91-8 CAPLUS

CN L-Alamine, N-[5-[(1E)-3-[bis(2-chloroethyl)amino]-1-propenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 322453-92-9 CAPLUS

N L-Alamine, N-[5-[(1E)-3-[bis(2-bromoethyl)amino]-1-propenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN

322453-93-0 CAPLUS L-Alanine, N-(5-(1E)-1,3-butadienyl-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (901) (CA INDEX NAME) CN

Absolute stereochemistry. Double bond geometry as shown.

L-Alanine, N-[2'-deoxy-5-[(1E)-4,4-dichloro-1,3-butadienyl]-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

RN 322453-96-3 CAPLUS

L-Alamine, N=[5=[(1E,3E)-4-bromo-4-chloro-1,3-butadienyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

10/560.88

Double bond geometry as shown.

RN 322453-98-5 CAPLUS
CN L-Alamine, N-[5-[(1E,3Z)-4-bromo-4-chloro-1,3-butadienyl]-2 -deoxy-P-phenyl-3-uridaylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 322454-00-2 CAPLUS
CN L-Alanine, N-[2'-deoxy-5-[(1E)-4,4-dibromo-1,3-butadienyl]-P-phenyl-5'uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

RN 322454-02-4 CAPLUS

CN L-Alanine, N-[2'-deoxy-5-[(1E)-3-[(4-oxo-4H-1,3-dioxin-6-yl)oxy]-1-propenyl]-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

322454-02-4 CAPLUS

L-Alanine, N-[2'-deoxy-5-[(1E)-3-[(4-oxo-4H-1,3-dioxin-6-yl)oxy]-1-propenyl]-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

322454-04-6 CAPLUS

1-Alanine, N-[2'-deoxy-5-[(1E)-3-[(5-methyl-4-oxo-4H-1,3-dioxin-6-yl)oxy]-1-propenyl]-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

322454-04-6 CAPLUS

L-Alanine, N-[2'-deoxy-5-[(1E)-3-[(5-methyl-4-oxo-4H-1,3-dioxin-6-yl)oxy]-1-propenyl]-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

322454-08-0 CAPLUS L-Alanine, N-[2'-deoxy-P-phenyl-5-[(trimethylsilyl)ethynyl]-5'-uridylyl]-, methyl ester (901) (CA INDEX NAME)

Me3Si-C=C

RN 322454-10-4 CAPLUS
CN L-Alanine, N-(2'-deoxy-5-ethynyl-P-phenyl-5'-uridylyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN 322454-10-4 CAPLUS
CN 1-Alanine, N-(2'-deoxy-5-ethynyl-P-phenyl-5'-uridylyl)-, methyl ester (901) (OA INDEX NAME)

Absolute stereochemistry.

RN 322454-15-9 CAPLUS
CN L-Alanine, N-[5-[(1E.78E]-4-bromo-1,3-butadienyl]-2'-deoxy-P-phenyl-5'-uridylyl-, methyl ester (9CI) (CA INDEX NAME)
Absolute stereochemistry.

10/560 883

- RN 322454-19-3 CAPLUS
- In l-Alanine, N-[5-[(1E,3Z)-4-bromo-1,3-butadienyl]-2'-deoxy-P-phenyl-5'uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

RN 322454-21-7 CAPLUS

CN 2, 4-Pentadienois acid, 5-[1-[2-deoxy-5-0-[[[(18)-2-methoxy-1-methy]-2-oxeethy] amino phenoxythosphinyl]-8-D-oxythro-pentofuranosyl]-1, 2, 4-tetrahydro-2, 4-dioxo-5-pyrimidinyl]-, ethyl ester, (2E, 4E)- (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

- RN 322454-23-9 CAPLUS
- CN 2,4-Pentadienoid acid,5-[1-[2-deoxy-5-0-[[[([S]-2-methoxy-1-methyl-2-oxoethyl]amino]phenoxyphosphiyl]-β-D-erythro-pentoframosyl]-1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl]-, ethyl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

RN 322454-23-9 CAPLUS

2,4-Pentadienoic acid, 5-[1-[2-deoxy-5-0-[[[(1S)-2-methoxy-1-methyl-2oxoethyl aminol phenoxyphosphinyl]-\(\beta \)-Derythro-pentofuranosyl]-1,2,3,4-tetrahydro-2,4-dioxo-5-pyrimidinyl]-, ethyl ester, (2E)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as described by E or Z.

322454-26-2 CAPLUS

January N-[5-[(1E)-4-chloro-1,3-butadienyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as described by E or Z.

322454-26-2 CAPLUS RN

L-Alanine, N=[5-((1E)-4-chloro-1,3-butadienyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as described by E or Z.

RN 322454-29-5 CAPLUS

Absolute stereochemistry. Double bond geometry as described by E or Z.

RN

322454-29-5 CAPLUS L-Alanine, N-[5-[(1E)-4-bromo-1,3-butadienyl]-2'-deoxy-P-phenyl-5'-uridylyl-, methyl ester (9CI) (OA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as described by E or Z.

RN

322454-32-0 CAPLUS L-Alanine, N-[5-(1-decynyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME) CN

322454-32-0 CAPLUS L-Alanine, N-[5-(1-decynyl)-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (9C1) (CA INDEX NAME) CN

Absolute stereochemistry.

Me_(CH₂)₇—c==c

322454-35-3 CAPLUS

L-Alanine, N-(α, α, α -trifluoro-P-phenyl-5'-thymidylyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

322454-35-3 CAPLUS

L-Alamine, N- $(\alpha, \alpha, \alpha$ -trifluoro-P-phenyl-5'-thymidylyl)-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

322454-69-3 CAPLUS L-Alanine, N-[S-[(IE)-2-chloroethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester [9CI] (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

322454-85-3 CAPLUS

L-Alanine, N-(2'-deoxy-P-phenyl-5'-uridylyl)-, methyl ester (9CI) (CA

Absolute stereochemistry.

THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS) OSC.G RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 46 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 2001:24117 CAPLUS
- Enzyme-catalyzed therapeutic agent (ECTA) design: activation of the antitumor ECTA compound NB1011 by thymidylate synthase
- AU Lackey, D. B.; Groziak, M. P.; Sergeeva, M.; Beryt, M.; Boyer, C.; Stroud, R. M.; Sayre, P.; Park, J. W.; Johnston, P.; Slamon, D.; Shepard, H. M.; Pegram, M. CS
- NewBiotics, Inc., San Diego, CA, 92121, USA Biochemical Pharmacology (2001), 61(2), 179-189 CODEN: BCPCA6; ISSN: 0006-2952 S0
- PB Elsevier Science Inc.
- Journal
- LA English
- The in vivo administration of enzyme-inhibiting drugs for cancer and infectious disease often results in overexpression of the targeted enzyme. We have developed an enzyme-catalyzed therapeutic agent (ECTA) approach in which an enzyme overexpressed within the resistant cells is recruited as an intracellular catalyst for converting a relatively non-toxic substrate to a toxic product. We have investigated the potential of the ECTA approach to circumvent the thymidylate synthase (TS) overexpression-based resistance of tumor cells to conventional fluoropyrimidine (i.e. 5-fluorouracil (5-FU) | cancer chemotherapy.
 - (E)-5-(2-Bromovinyl)-2'-deoxy-5'-uridyl Ph
 - 1-methoxyalaninylphosphoramidate (NB1011) is a pronucleotide analog of (E)-5-(2-bromovinyl)-2'-deoxyuridine (BVdU), an antiviral agent known to be a substrate for TS when in the 5'-monophosphorylated form. NB1011 was synthesized and found to be at least 10-fold more cytotoxic to
 - 5-FU-resistant, TS-overexpressing colorectal tumor cells than to normal cells. This finding demonstrates that the ECTA approach to the design of novel chemotherapeutics results in compds. that are selectively cytotoxic to tumor cell lines that overexpress the target enzyme, TS, and therefore may be useful in the treatment of fluoropyrimidine-resistant cancer.
- 232925-18-7, NB 1011

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES

(enzyme-catalyzed therapeutic agent design; activation of antitumor NB1011 by thymidylate synthase)

CAPLUS

L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

THERE ARE 20 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS) OSC.G RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- 1.4 ANSWER 47 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 1999:757496 CAPLUS
- DN 132:137652
- Potential Multifunctional Inhibitors of HIV-1 Reverse Transcriptase. Novel [AZT]-[TSAO-T] and [d4T]-[TSAO-T] Heterodimers Modified in the Linker and in the Dideoxynucleoside Region
- Miche Diceoxymboleoside Region Velazquez, Sonsoles; Tunon, Victoria; Jimeno, Maria Luisa; Chamorro, Cristina; De Clercq, Erik; Balzarini, Jan; Camarasa, Maria Jose Instituto de Quimica Medica (C.S.I.C.), Madrid, 28006, Spain Journal of Medicinal Chemistry (1999), 42(25), 5188-5196 AU
- 08
- so
- CODEN: JMCMAR; ISSN: 0022-2623 PB American Chemical Society
- T.A
 - English In an attempt to combine the anti-HIV-inhibitory capacity of nucleoside reverse transcriptase (RT) inhibitors (NRTI) and non-nucleoside RT inhibitors (NNRTI), several heterodimer analogs of the previously reported [AZT]-(CH2)3-[TSAO-T] prototype have been prepared. In these novel series, other NRTIs, an expanded range of linkers with different conformational freedom and other attachment sites for these linkers on the base part of the NRTI analog have been explored. Moreover, in order to circumvent the dependence of the NRTI moiety of the heterodimer on activation by cellular nucleoside kinases, novel heterodimers in which the NRTI is bearing a masked monophosphate group at the 5'-position are described. Among the novel beterodimers, several derivs. show a potent anti-HIV-1 activity, which proved comparable, or even superior, to that of the AZT heterodimer prototype. The nature of the NRTI was important for the eventual anti-HIV-1 activity. In particular, the d4T heterodimer derivative containing a Pr linker between the N-3 positions of the base of TSAO-T and d4T was apprx.5- to 10-fold more inhibitory to HIV-1 than the corresponding AZT heterodimer prototype.
 - 256520-37-3P 256520-41-9P
- RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent) ([AZT]-[TSAO-T] and [d4T]-[TSAO-T] heterodimers modified in the linker and in the dideoxynucleoside region as potential multifunctional
- inhibitors of HIV reverse transcriptase) 256520-37-3 CAPLUS
- L-Alanine, N-[3-[3-[3-[(5R,6R,8R,9R)-4-amino-9-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-6-[[((1,1-
- dimethylethyl)dimethylsilyl]oxy]methyl]-2,2-dioxido-1,7-dioxa-2-

thiaspiro[4.4]non-3-en-8-yl]-3,6-dihydro-5-methyl-2,6-dioxo-1(2H)-pyrindidnyl]propyl]-P-phenyl-5'-thymidylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

N 256520-41-9 CAPLUS
N 1-Alanine, N-[3-[6-[3-[(5R,6R,6R,9R)-4-amino-9-[[(1,1-dinethylethylidimethylesilyl]oxy]-6-[[[(1,1-dinethylethylidimethylesilyl]oxy]-6-[[[(1,1-dinethylethylidimethylesilyl]oxy]methyl]-2,2-dioxido-1,7-dioxa-2-thiaspiro[4.4]non-3-methyl-2,6-dioxo-1(2R)-pyzimidinyl]hexyl]-P-phenyl-5'-thymidylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

256520-25-9P 256520-29-3P 256520-33-9P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent) ([AZT]-[TSAO-T] and [d4T]-[TSAO-T] heterodimers modified in the linker and in the dideoxynucleoside region as potential multifunctional inhibitors of HIV reverse transcriptase) 256520-25-9 CAPLUS

L-Alanine, N-(P-phenyl-5'-thymidylyl)-, methyl ester (CA INDEX NAME)

Absolute stereochemistry.

256520-29-3 CAPLUS

L-Alanine, N-(3-(3-bromopropyl)-P-phenyl-5'-thymidylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

RN

256520-33-9 CAPLUS L-Alanine, N-[3-(6-bromohexyl)-P-phenyl-5 -thymidylyl]-, methyl ester (9CI) (CA INDEX NAME)

10/560.887

OSC.G 21 THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS)
RE.CHT 53 THERE ARE 53 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 48 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1999:499942 CAPLUS

N 131:257780

5'-Phosphoramidates and 5'-Diphosphates of

 $2\,\text{'-O-Allyl-}\beta\text{-D-arabinofuranosyl-uracil, -cytosine, and -adenine:}$ Inhibition of Ribonucleotide Reductase

AU Manfredini, Stefano; Baraldi, Pier Glovanni; Durini, Elisa; Vertuani, Silvia; Balzarini, Jan; De Clercq, Erik; Karlsson, Anna; Buzzoni, Valentina; Thelander, Lars CS Department of Pharmaceutical Sciences, Ferrara University, Italy

CS Department of Pharmaceutical Sciences, Ferrara University, Italy SO Journal of Medicinal Chemistry (1999), 42(17), 3243-3250 CODEN: JMCNAR; ISSN: 0022-2623

CODEN: JMCMAR; ISSN: 0022-B American Chemical Society

PB American Unemical Society

LA English

AB Continuing our studies on ribonucleotide reductase (RNR) mechanism-based inhibitors, we have now prepared the diphosphates (DP) of 2 "-0-allyl-1-6-P-arabinofuranosyl-uracil and -ovtosine and

2.—G-allyl-9-B-b-atableoturanomyl-adentic and evaluated their inhibitory activity against recombinant murine RNR, 2.—G-Allyl-araUDP proved to be inhibitory to RNR at an ICSO of 100 MM, whereas 2.—G-allyl-araCDP was only marginally active (ICSO 1 mM) and 2.—G-allyl-araCDP was onepletely inactive. The susceptibility of the parent nucleosides to phosphorylation by thymidine kinase and

2'-deoxycytidine kinase was also investigated, and all nucleosides proved to be poor substrates for the above-cited kinases. Moreover, prodrugs of 2'-0-allyl-araU and -araC monophosphates, namely 2'-0-allyl-araU and -araC, monophosphates, namely 2'-0-allyl-araU and -araC, were prepared and tested against tumor cell proliferation but proved to be more assumed to the property of the provided to be a substrained by the provided the provided to be a substrained by the provided the provided to be a substrained by the provided the provide

our results. I med. The data confirm that for both the natural and analog nucleoside diphosphates, the principal determinant interaction with the active site of RRR is with the diphosphate group, which forms strong hydrogen bonds with Glu623, Thr624, Ser625, and Thr209. Our findings indicate that the poor phosphorylation may represent an explanation for the lack of marked in vitro cytostatic activity of the test compds. 239117-80-72 245078-97 245078-97 245078-97 2507

Ri. BAC (Biological activity or effector, except adverse); BPR (Biological process); BBR (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); BRBP (Preparation); PROC (Process) (preparation and ribonuclectide reductase inhibition of phosphoramidates and diphosphates of ally1-D-arabinofuranosyl-uracil, -cytosine and -adenine)

239117-80-7 CAPLUS

CN 2,4(1E,3H)-Pyrimidinedione, 1-[5-0-[[(1S)-2-ethoxy-1-methyl-2-oxoethyl]amino]phenoxyphosphinyl]-2-o-2-propen-1-yl-β-D-arabinofuranosyll- (CR_INDEX_NAME)

Absolute stereochemistry.

RN 245078-09-5 CAPLUS

N L-Alanine, N-[[1-(4-amino-2-oxo-1(2H)-pyrimidinyl)-1-deoxy-2-0-2-propenylβ-D-arabinofuranos-5-0-yl]phenoxyphosphinyl]-, ethyl ester (9CI) (CA INDEX NAME)

OSC.G 16 RE.CNT 22 THERE ARE 16 CAPLUS RECORDS THAT CITE THIS RECORD (16 CITINGS) THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 49 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1999:487370 CAPLUS

AN 131:111426 DN

Method for drug screening and enzyme-activated phosphoryl or

phosphoramidate prodrugs and their synthesis and use in inhibition of cell proliferation

Shepard, H. Michael; Groziak, Michael P. Newbiotics, Inc., USA PCT Int. Appl., 113 pp. CODEN: PIXXD2

PA

SO

Patent English

FAN.CNT 2

	PATENT NO.				KIND DATE			APPLICATION NO. WO 1999-US1332											
PI																			
		W:	AL.	AM.	AT.	AU.	AZ.	BA.	BB.	BG.	Bi	R.	BY.	CA.	CH.	CN.	CU.	CZ.	DE.
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	JP	3265304				B2		2002	0311										
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PRAI	US	1998	-722	64P		P		1998	0123										
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	US	1998-108634P				Ρ.		1998	1116										
	EP	1999	-904	195		A3		1999	0122										
	JP	1000	-528	bbl		A.3		1999	0122										

WO 1999-US1332 W 19990122 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT OS CASREACT 131:111426; MARPAT 131:111426

10/560.887

- This invention provides a method for identifying potential therapeutic agents by contacting a target cell with a candidate therapeutic agent which is a selective substrate for an endogenous, intracellular enzyme in the cell which is enhanced in its expression as a result of selection by biol. or chemotherapy. This invention also provides methods and examples of mols. for selectively killing a pathol. cell by contacting the cell with a prodrug that is a selective substrate for an endogenous, intracellular enzyme. The prodrug is subsequently converted to a cellular toxin. Further provided by this invention is a method for treating a pathol, characterized by pathol,, hyperproliferative cells in a subject by administering to the subject a prodrug that is a selective substrate for an endogenous, overexpressed, intracellular enzyme, and converted by the enzyme to a cellular toxin in the hyperproliferative cell. Thus, E-5-(2-bromovinyl)-2-deoxy-5-uridyl Ph L-alaninylphosphoramidate (BVDU-PA) was prepared by reacting E-5-(2-bromoviny1)-2'-deoxyuridine with Ph 1-methoxyalaninyl phosphorochloridate in anhydrous DMF in the presence of imidazole (HC1 scavenger). BVDU-PA was added to H630R10 cells and to CCD18co control cells. H630R10 cells expressed 10-fold more thymidylate synthase enzyme than CCD18co cells. BVDU-PA displayed IC50's of 217 and 2810 µM on the H630R10 cells and CCD18co cells, resp.
- RE: BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
 - (method for drug screening and enzyme-activated phosphoryl or phosphoramidate prodrugs and their synthesis and use in inhibition of cell proliferation) 232925-18-7 CAPLUS
- L-Alanine, N-[5-[(1E)-2-bromoethenyl]-2'-deoxy-P-phenyl-5'-uridylyl]-, methyl ester (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

- 232925-20-1 CAPLUS
- L-Alanine, N-(2'-deoxy-5-fluoro-P-phenyl-5'-uridylyl)-, methyl ester (9CI) (CA INDEX NAME)

- 232925-21-2 232925-22-3 232925-23-4
 - RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (method for drug screening and enzyme-activated phosphoryl or phosphoramidate prodrugs and their synthesis and use in inhibition of cell proliferation)

232925-21-2 CAPLUS

L-Alanine, N-[2'-deoxy-5-[(1E)-3-[[bis(1-aziridiny1)phosphiny1]oxy]-1propenyl]-P-phenyl-5'-uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Double bond geometry as shown.

232925-22-3 CAPLUS

L-Alanine, N-[2'-deoxy-5-[(1Z)-3-[[bis(1-aziridinyl)phosphinyl]oxy]-1propenyl]-P-phenyl-5 -uridylyl]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

Double bond geometry as shown.

232925-23-4 CAPLUS

L-Alanine, N-[2'-deoxy-5-[3-[[bis(1-aziridiny1)phosphiny1]oxy]-1-propyny1]-P-phenyl-5'-uridyly1]-, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OSC.G THERE ARE 14 CAPLUS RECORDS THAT CITE THIS RECORD (14 CITINGS) RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 50 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 1999:448710 CAPLUS AN
- DN 131:170568
- Synthesis, cytostatic activity and inhibition of ribonucleotide reductase by 5'-phosphoramidates and 5'-diphosphates, of 2'-O-allyl-arabinofuranosyl nucleosides
- Manfredini, S.; Baraldi, P. G.; Durini, E.; Balzarini, J.; De Clercq, E.; Karlsson, A.; Buzzoni, V.; Thelander, L. AU
- Narisson, A., Buzzon, V., Inelander, h. Department of Pharmaceutical Sciences, Ferrara University, Italy Nucleosides & Nucleotides (1999), 18(4 & 5), 1007-1008 CODEN: NUNDOS; ISSN: 0732-8311 Marcel Dekker, Inc.
- so
- PB
- English LA
 - A symposium reporting that the diphosphates of a series of
- 2'-0-allyl-1- β -D-arabinofuranosyl derivs., previously obtained by the

authors, have been prepared and tested for their inhibitory activity in an in vitro assay using R1 and R2 subunits of the purified recombinant mouse ribonucleotide reductase (RNR). 2'-O-Allyl-araU diphosphate proved to be inhibitory, with an IC50 of 100 µM. The 5'-phosphoramidate pronucleotide of 2'-O-allyl-araU was also prepared and tested for inhibition of tumor cell proliferation.

239117-80-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation, cytostatic activity and inhibition of ribonucleotide reductase by phosphoramidates and diphosphates of allylarabinofuranosyl

239117-80-7 CAPLUS

2,4(1H,3H)-Pyrimidinedione, 1-[5-0-[[[(1S)-2-ethoxy-1-methyl-2oxoethyl]amino]phenoxyphosphinyl]-2-0-2-propen-1-yl- β -Darabinofuranosyl]- (CA INDEX NAME)

Absolute stereochemistry.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 51 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN AN 1998:382225 CAPLUS

DN

OREF 129:10111a,10114a

Synthesis and evaluation of some masked phosphate esters of the anti-herpesvirus drug 882C (netivudine) as potential antiviral agents

McGulgan, C.; Perry, A.; Yarnold, C. J.; Sutton, P. W.; Lowe, D.; Miller, W.; Rahim, S. G.; Slater, M. J. Welsh School of Pharmacy, University of Wales Cardiff, Cardiff, CF1 3XF, AU

SO Antiviral Chemistry & Chemotherapy (1998), 9(3), 233-243

CODEN: ACCHEH; ISSN: 0956-3202 PB International Medical Press

Journal

LA English

AB A number of sym. and asym. 5'-phosphate esters of the potent

anti-varicella-zoster virus (VZV) agent 1-β-D-arabinofuranosyl-5-(1-propynyl)uracil (netivudine) were prepared as potential lipophilic, membrane-soluble prodrugs of the bioactive phosphate forms. The compds. were prepared by the base-catalyzed coupling of various phosphorochloridates with the free nucleoside analog. The compds. were fully characterized by a range of spectroscopic and anal. methods and were studied for their inhibition of several viruses in tissue culture. All of the phosphate esters were inactive against human cytomegalovirus, herpes simplex virus type 2, VZV, human immunodeficiency virus type 1 and influenza A virus (EC50 >100 µM) except the 5'-(4-nitrophenyl Ph phosphate), which inhibited influenza A virus. The relative rate of esterase-mediated hydrolysis of netivudine 5 - (L-methoxyalaninyl Ph phosphate) was measured in order to rationalize the poor antiviral action, and data were collected on possible metabolites in support of this anal.

Cell-specific esterases are implicated as key determinants of the antiviral potency of prodrugs of this type. 208777-84-8P, Netivudine 5'-(L-methoxyalaninyl phenyl phosphate) RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process) (preparation and evaluation of some masked phosphate esters of 882C

(netivudine) as antiviral agents)

208777-84-8 CAPLUS

 $\begin{array}{lll} 2200/7-03-10 & \text{Carlos} \\ 2.9\,(1|8,3|8)-\text{Pyrimidinedione}, & 1-[5-0-[[[(18)-2-\text{methoxy}-1-\text{methy}]-2-\text{oxoethy}]]\,\text{amino}]\,\text{phenoxyphosphiny}]-\beta-D-\text{arabinofuranosy}]-5-(1-\text{propyn}-1-\text{methy})-3$ v1)- (CA INDEX NAME)

Absolute stereochemistry.

Me-C= C

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(preparation and evaluation of some masked phosphate esters of 882C (netivudine) as antiviral agents) 208777-85-9 CAPLUS

2,4(1H,3H)-Pyrimidinedione, 1-[5-0-[[[(1S)-1-(methoxycarbonyl)-2methylpropyl]amino]phenoxyphosphinyl]-β-D-arabinofuranosyl]-5-(1propyn-1-vl)- (CA INDEX NAME)

Absolute stereochemistry.

Ma-c=c

- OSC.G THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD (6 CITINGS) RE.CNT THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT
- ANSWER 52 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- AN 1997:334014 CAPLUS 127:50955
- OREF 127:9729a,9732a
- Phosphorus-based combinatorial libraries; use of amino acid derivatives as synthons
- ΑU Fathi, Reza; Patel, Rina; Cook, Alan F.
- PharmaGenics Inc., Allendale, NJ, 07401, USA Molecular Diversity (1997), 2(3), 125-134 CODEN: MODIF4; ISSN: 1381-1991 CS
- so
- PB ESCOM
- Journal
- LA English

$$dT = 0 \quad 0 \quad 0 \quad 0 \quad 0$$

$$dT = 0 \quad P = 0 \quad R^2 - P = 0 \quad R^2 - P = 0$$

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$$R = 0 \quad 0$$

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$$R = 0 \quad 0$$

Phosphorus has been used as a scaffold to prepare phosphoramidate

107560 88

combinatorial libraries I [HO-RH-OH , HO-RZ-OH - variable bifunctional group containing two hydroxy functions H3 - Met-Coe, Ala-OMe, Val-OEL, Glu(OED)-OEL, Phe-OMe, Tyr-OEL, Leu-OCMe2, ILe-OCMe3, Trp-OMe, Pro-OMe, App(CCMe3)-OCMe3) which one of the diversity elements resulted from amino acid derive. A small library was prepared for anal. and characterization purposes, followed by a larger library of approx. 8800 compds. Libraries were assembled on solid supports using the conventional pool-and-divide method, followed by cleavage from the supports at the end of the synthesis. Mass spectrometry was used to confirm that library synthesis stability of commods of this type.

191017-38-6P 191017-39-7P 191017-40-0P

191017-42-2P 191017-43-3P

RL: SPN (Synthetic preparation); PREP (Preparation)

(amino acid derivs. as synthons in preparation of phosphorus-based combinatorial libraries)

191017-38-6 CAPLUS

L-Methionine, N-[P-(5'-deoxythymidin-5'-yl)-3'-thymidylyl]-, ethyl ester
(9C1) (CA INDEX NAME)

Absolute stereochemistry.

RN 191017-39-7 CAPLUS
CN L-Tyrosine, N-[P-(5'-deoxythymidin-5'-yl)-3'-thymidylyl]-, ethyl ester
(9C1) (CA INDEX NAME)

Absolute stereochemistry.

RN 191017-40-0 CAPLUS

CN L-Valine, N-(P-(5'-deoxythymidin-5'-yl)-3'-thymidylyl]-, ethyl ester (9CI)
(CA INDEX NAME)

191017-42-2 CAPLUS

L-Isoleucine, N-[P-(5'-deoxythymidin-5'-y1)-3'-thymidyly1]-,
1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

191017-43-3 CAPLUS

L-Glutamic acid, N-[P-(5'-deoxythymidin-5'-yl)-3'-thymidylyl]-, diethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OSC.G THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS) THERE ARE 24 CITED REFRENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT OSC.G 1 RE.CNT 24

- ANSWER 53 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1.4
- 1990:552990 CAPLUS AN
- DN
- OREF 113:26023a,26026a
- Oligonucleotides and nucleotide peptides. LIII. Synthesis and properties of thymidylyl-(5'-3')-thymidine-(PM-N)-serine ethyl ester

- or thymidylyl_(0'-45')-ctymidine-(FM-N)-serine ett Juodka, B.; Bagdoniene, L. Vil'nyus. Gos. Univ., Vilnius, USSR Khimiya Prirodnykh Soedinenii (1990), (1), 88-93 CODEN: KPSUAR; ISSN: 0023-1150
- McIntosh

Russian CASREACT 113:152990

CH2OH CHC02Et сиси20н CHC02Et

Treating TpT as its tri-n-octylammonium salt with H-Ser-OEt (1:3) in pyridine containing triisopropylbenzenesulfonyl chloride, N-methylimidazole, and Et3N gave 38% yield of a mixture containing diastereomeric oligonucleotide amino acids I and II. On treatment of I and II with 1N HCl, the phosphoamide undergoes 20% N \rightarrow O migration. In basic media, compared to other nucleotide peptides, decomposition of phosphoamide bonds in I and II occurs. 129704-55-8P 129704-56-9P

RL: SPN (Synthetic preparation); PREP (Preparation) (preparation and acid-base treatment of)

129704-55-8 CAPLUS L-Serine, N-3'-thymidylyl-, 1-ethyl ester, P-5'-ester with thymidine, (R)- (9CI) (CA INDEX NAME)

129704-56-9 CAPLUS L-Serine, N-3'-thymidylyl-, 1-ethyl ester, P \rightarrow 5'-ester with thymidine, (S)- (9CI) (CA INDEX NAME)

ANSWER 54 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1986:225188 CAPLUS

AN DN 104:225188

OREF 104:35735a,35738a Thymidine nucleosides

Letsinger, Robert L.; Schott, Margaret E.

PA United States Dept. of Health and Human Services, USA

- U.S., 9 pp. Cont. of U.S. Ser. No. 444,438, abandoned.
- CODEN: USXXAM Patient
- FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
PI	US 4547569	A	19851015	US 1984-620801	19840614		

US 444438 A0 US 1982-444438 19821124 PRAI US 1982-444438 A2

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- CASREACT 104:225188
- * STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY AVAILABLE VIA OFFLINE PRINT *
- AB Th = 1-thyminyl throughout this abstract Nucleotides I (R = R1 are MeNH, EtNH, NH2, H; Z1 = alkylene; n is an integer of 0-19) were prepared, and they showed their usefulness as fluorescent probes. Two different thymidine derivs, were treated with 2-ClC6H4OPCl2, and the phosphite triester obtained was converted, in a series of reactions, to nucleotide derivative II.
- 93084-42-5P
 - RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (preparation and amidation of, by butanediamine, selective deprotection in) 93084-42-5 CAPLUS
- Thymidine, P-deoxy-P-[(2-ethoxy-2-oxoethyl)amino]-5'-0-(phenoxyacetyl)thymidylyl-(3' \rightarrow 5')-3'-0-[(4-

methoxyphenyl)diphenylmethyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

OSC.G 1. RE.CNT 3 THERE ARE 12 CAPLUS RECORDS THAT CITE THIS RECORD (12 CITINGS) THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- ANSWER 55 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 1984:611660 CAPLUS AN
- 101:211660
- OREF 101:32091a,32094a
- Intercalating agents specifying nucleotides
- Letsinger, Robert L.; Schott, Margaret E.
- United States Dept. of Health and Human Services, USA
- U. S. Pat. Appl., 16 pp. Avail. NTIS Order No. PAT-APPl-6-444 438.
- CODEN: XAXXAV
- Patent

10/560.887

LA English FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 444438	A0	19840817	US 1982-444438	19821124
	US 4547569	A	19851015	US 1984-620801	19840614
DDAT	TIG 1002_444430	7.2	19091194		

PRAI US 1982-444438 A2 19821124 ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

- AB Phenanthridinium compds. I (Th = thymin-1-y1; R, Rl = H, NH2, MoNH; EtNH;) were prepared I can serve as site specific inhibitors for enzymic processes involving polymuclectides, as reagents for selective cleavage or modification of polymuclectide chains, and as agents for introducing markers, e.g., fluorescent probes, at specified regions in polymuclectides. Thus, I (R = H = NH2) (II) was prepared by constructing the nuclectide portion containing the NGCIGCONHCCH2/ANHZ group, and the p-mitrophenyl ester of the phenanthridinium unti and linking the 2 fragments via an amide bond. II binds strongly to poly(A) at 0° and weakly or not at all to poly(G), poly(G), poly(G), poly(G), poly(G),
- IT 93084-42-5P
 RL: SPN (Synthetic preparation); PREP (Preparation)
- (preparation and amidation, with diaminobutane) RN 93084-42-5 CAPLUS
- CN Thymidine, P-deoxy-P-[(2-ethoxy-2-oxoethyl)amino]-5'-O-(phenoxyacetyl)thymidylyl-(3'-5')-3'-O-[(4-methoxyphenyl)diphenylmethyl)-(9CI) (GA INDEX NAME)

- ANSWER 56 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1983:198675 CAPLUS
- AN
- DN
- OREF 98:30231a,30234a
- Oligonucleotides and nucleotide peptides. XLII. Efficiency of the intramolecular effect of the carboxyl group of amino acids in nucleotidyl-(P -> N)-amino acids (peptides) in relation to its position
- ΑU
- CS SO
- Juodka, B.; Liorancaite, L.; Baltenas, V. V11'nyuss. Gos. Univ., Vilnius, USSR Khimiya Prirodnykh Soedinenii (1982), (6), 740-6 GODEN: KPSUAR; ISSN: 0023-1150
- Journal
- Russian
- Title compds., e.g., deoxythymidylyl(5'-N)phenylalanine (I), were prepared and their hydrolytic stabilities were examined. The phenylalanine carboxvl group in I is much more effective than that in the $(3 \to N)$ -analog of I in promoting intramol. catalysis of hydrolysis. The carboxyl group in oligonucleotidyl $(P \cdot m \to N)$ amino acids is responsible for cleavage of the phospho ester bond in acidic medium.
- RL: SPN (Synthetic preparation); PREP (Preparation)
 - (preparation of)
- 81202-42-8 CAPLUS RN
- Thymidine, P-deoxy-P-[[2-ethoxy-2-oxo-1-(phenylmethyl)ethyl]amino]thymidylyl-(3'-5')-, (S)- (9CI) (CA INDEX NAME)

- 1.4 ANSWER 57 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 1982:143270 CAPLUS AN
- DN 96:143270
- OREF 96:23585a,23588a
- Synthesis and some properties of oligonucleotidyl-(Pm -> N)-serines
- Liorancaite, L.; Juodka, B. AU
- Vilnius State Univ., Vilnius, USSR

Nucleic Acids Symposium Series (1981), 9, 215-18 CODEN: NACSD8; ISSN: 0261-3166

LA

For diagram(s), see printed CA Issue.

Nucleotidyl amino acids I-VI were prepared by condensing TpT or TpdC with the amino acid derivative by (PhO)2P(O)CL, TPS, or carbonyldilmidazole (CDI). The CDI method gave the best results. III underwent an N-O migration in acid, whereas the phosphoamide bond was cleaved in alkaline medium.

78396-63-1P 81136-03-0P 81202-42-8P RL: SPN (Synthetic preparation); PREP (Preparation)

78396-63-1 CAPLUS

L-Serine, N=3'-thymidylyl-, 1-ethyl ester, P \rightarrow 5'-ester with thymidine (9CI) (CA INDEX NAME) CN

81136-03-0 CAPLUS

Thymidine, P.2'-dideoxy-P-[[2-ethoxy-1-(hydroxymethyl)-2-oxoethyl]amino]cytidylyl-(5'-3')-, (S)- (9CI) (CA INDEX NAME)

81202-42-8 CAPLUS

Thymidine, P-deoxy-P-[[2-ethoxy-2-oxo-1-(phenylmethyl)ethyl]amino]thymidylyl-(3'-5')-, (S)- (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{CH}_2-\text{Ph} \\ \text{O} \\ \text{N} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{H} \\ \text{O} \\ \text{CH}_2-\text{O} \\ \text{O} \\ \text{E} \\ \text{O} \\ \text{O} \\ \text{H} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{H} \\ \text{O} \\ \text{O} \\ \text{O} \\ \text{H} \\ \text{O} \\$$

ANSWER 58 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1982:7023 CAPLUS

AN DN 96:7023

OREF 96:1287a,1290a

Selectivity in binding a phenanthridinium-dinucleotide derivative to homopolynucleotides

ΑU Letsinger, Robert L.; Schott, Margaret E.

- Dep. Chem., Northwestern Univ., Evanston, IL, 60201, USA Journal of the American Chemical Society (1981), 103(24), 7394-6
- CODEN: JACSAT; ISSN: 0002-7863
- LA English
- For diagram(s), see printed CA Issue.
- Dinucleotide I was synthesized as a prototype of a mol. bearing a biol. active group (diaminomethylphenylphenanthridinium) joined covalently to an oligonucleotide recognition system (thymidylylthymidine) by a linker that permits intercalation of the active group in the pocket formed by the nucleotide and complementary bases in another polynucleotide strand. Spectrophotometric data show that I binds strongly to poly(A) at 0° and weakly or not at all with poly(G), poly(C), poly(U) and poly(I). On warming, the complex with poly(A) dissors. (Tm .apprx.47° in absence of salt, .apprx.25° in 0.1M NaCl; Tm - melting temperature). The strong interaction of I with poly(A) is attributed to the presence of 2 types of binding sites in I which can act cooperatively, the phenanthridinium ring and the pyrimidine bases (which show Watson-Crick type selectivity).
- RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
- (preparation and reaction of, with diaminobutane) RN 79999-73-8 CAPLUS
- Thymidine, P-deoxy-P-[(2-ethoxy-2-oxoethyl)amino]-5'-0-(phenoxyacetyl)thymidylyl-(3'-5')-3'-0-[bis(4methoxyphenyl)phenylmethyl] - (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

THERE ARE 21 CAPLUS RECORDS THAT CITE THIS RECORD (21 CITINGS) asc c

- ANSWER 59 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 1981:462616 CAPLUS AN
- 95:62616
- OREF 95:10591a,10594a

10/560.887

- Synthesis and properties of oligonucleotidyl -(Pm → N)- and -(Pm → 0)-serines
- AU Liorancaite, L.; Bagdonas, A.
- Vilnius State Univ., Vilnius, USSR
- Aktual, Probl. Razvit, Nauchn, Issled, Molodykh Uch, Spets, Vil'nyus, Gosuniv. im. V. Kapsukasa, Mater. Konf. Molodykh Uch. Spets. Estestv. Khim. Fak. (1980), 35-6. Editor(s): Grigonis, I. Publisher: Vil'nyus. Gos. Univ. im. V. Kapsukasa, Vilnius, USSR. CODEN: 44ZNA8
- Russian
- The title compds. EtO-Ser-(PM-°N)-d(TPT) (I) and

EtO-Ser-(PM-°O)-d(TpT) were prepared from H-Ser-OEt and d(TpT). I is relatively stable in acid solution, but hydrolyzes in basic solution to give products indicating both P-N and P-O cleavage, the former presumably via β -elimination of the serine residue.

78396-63-1P RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn and hydrolysis of)

78396-63-1 CAPLUS

L-Serine, N-3'-thymidylyl-, 1-ethyl ester, P-5'-ester with thymidine (9CI) (CA INDEX NAME)

- 1.4 ANSWER 60 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 1978:580327 CAPLUS 89:180327
- DN OREF 89:28027a,28030a
- Phenomenon of intramolecular catalysis in oligonucleotidyl (Pm > N) -amino acids
- AU Leimontaite, R.; Liorancaite, L.; Juodaka, B.
- SO
- Jestonica (1977), Vilnjus, USSR Tezisy Dokl. Resp. Konf. Molodykh Uch.-Khim., 2nd (1977), Volume 1, 157 Publisher: Akad. Nauk Est. SSR, Inst. Khim., Tallinn, USSR. CODEN: 38RMAG
- Conference
- LA Russian
- AB Thymidylyl-(3 ' → 5)-thymidine(Pm → N)DL-phenylalanine Et
- ester (I) was prepared by the pyrophosphate method and saponified to give thymidyly1-(3' \rightarrow 5)-thymidine(Pm \rightarrow N)D1-phenylalanine (II).

thysioly.Y-(3 -3 -3)-thymidine (mm + N)Da-phenylaidhine (17).

I was stable in alkaline and neutral solution and hydrolyzed in 2N HCl at 50° to give thymidylylthymidine (III) and Pha-OEt. II was more reactive in acidic media and hydrolyzed to give III, phenylalanine, thymidylic acid, and N-thymidylyl-Di-phenylalanine.

68058-22-0P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation and hydrolysis of)

68058-22-0 CAPLUS

Thymidine, P-deoxy-P-[[2-ethoxy-2-oxo-1-

(phenylmethyl)ethyllaminolthymidylyl-(3'→5')- (9CI) (CA INDEX NAMEL

ANSWER 61 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

1978:121671 CAPLUS

Synthesis of nucleotidyl- and olignucleotidyl (P - N) lysines and their immobilization on Sepharose

AU Juodka, B.; Liorancaite, L.; Leimontaite, R.; Malinauskas, A.; Kulys, J.; Sokolova, N. I.; Shabarova, Z. A.

CS so

Vil'nyus. Gos. Univ., Vilnius, USSR Khimiya Prirodnykh Soedinenii (1977), (3), 435-6 CODEN: KPSUAR; ISSN: 0023-1150

Russian

AB R-DL-Lys-OR1, DL-Lys(R)-OR1 (R = 5'-adenylyl, 5'-thymidylyl, Q; R1 = H, Et) were prepared by pyrophosphate, dicyclohexylcarbodiimide, or mixed anhydride condensation reactions and immobilized by treatment with cyanogen bromide activated Sepharose 4B.

65718-47-0P RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation and immobilization on Sepharose) 65718-47-0 CAPLUS

Thymidine, P-[[5-amino-1-(ethoxycarbonyl)pentyl]amino]-P-deoxythymidylyl-(3'→5')- (9CI) (CA INDEX NAME)

ANSWER 62 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1974:449967 CAPLUS

AN 81:49967

OREF 81:7983a,7986a

Oligonucleotidic compounds. XLVII. Synthesis of diribonucleoside phospho(P .far. N)amino acid derivatives

AU Juodka, B. A.; Smrt, Jiri

CS Cesk. Akad. Ved, Prague, Czech.

so Collection of Czechoslovak Chemical Communications (1974), 39(4), 963-8 CODEN: CCCCAK; ISSN: 0010-0765

Journal

5'-0-Dimethoxytrityl-2'-0-tetrahydropyranyluridylyl-(3' →5')

-2', -3'-O-ethoxynethyleneuridine-(P \rightarrow N)-cyclohexylamide and (P \rightarrow N)-glycine Et ester, and 5'-O-dimethoxytriyl-2'-O-acetyl-N6-acetyladenylyl-(3' \rightarrow 5')-2', 3'-di-O-benzoyluridine-(P \rightarrow N)-cyclohexyl-N6-acetyl N)-DL-alanine tert-Bu ester were prepared from fully protected uridylyl-(3' \rightarrow 5')-uridine and adenylyl-(3' \rightarrow 5')-uridine with the use of

bis(p-nitrophenyl) phosphochloridate.

RL: SPN (Synthetic preparation); PREP (Preparation)

- (preparation of)
 - (SPI)-62-1 CAPLUS
 Adenosine, 2',3'-d1-O-benzoyl-P-deoxy-P-[[2-(1,1-dimethylethyl)-1-methyl-2-oxeethyl]amino]-uridylyl-(5'-3')-N-acetyl-5'-O-[bis(4-methoxyphenyl)phenylmethyl]-, 2'-acetate (9CI) (CA INDEX NAME)

Absolute stereochemistry.

PAGE 1-A

PAGE 2-A

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

- ANSWER 63 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN
- 1971:471336 CAPLUS ΑN
- DN 75:71336
- OREF 75:11256h,11257a
- Optical rotatory dispersion and circular dichroism of mono- and
- ΑU
- CS
- obcidar forecory dispersion and oriotatar forential of mono- and oligonucleotide-amino acids (amidates) Gromova, E. S.; Tyaglov, B. V.; Shabarova, Z. A. Lab. Bioorg. Chem., Moscow State Univ., Moscow, USSR Biochimica et Biophysica Acta, Nucleic Acids and Protein Synthesis (1971), so 240(1), 1-1
- CODEN: BBNPAS; ISSN: 0005-2787
 - Journal
- LA English AB
- ORD and CD of 23 mono- and oligonucleotide amino acids were studied. ORD and CD of purine nucleotides with an aromatic amino acid or amine display a Cotton effect of opposite sign and greater amplitude than that of unsubstituted nucleotides. 33644-82-5
- RL: PRP (Properties)
- (optical properties of) 33644-82-5 CAPLUS
- Alanine, 3-phenyl-N-phosphono-, 1-methyl ester, DL-, 3'-ester with thymidine, 5'-ester with uridine (BCI) (CA INDEX NAME)

RN

OSC.G 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

ANSWER 64 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN 1967:55702 CAPLUS

Synthesis of thymidylyl-(3' → 5')-uridino-(P →

N)-phenylalanine

ΑU Sokolova, N. I.; Mel'nikova, V. I.; Shabarova, Z. A.; Prokof'ev, M. A.

Univ., Moscow, USSR

Vestnik Moskovskogo Universiteta, Seriya 2: Khimiya (1966), 21(5), 119-21 CODEN: VMUKA5; ISSN: 0579-9384

Journal

Russian

For diagram(s), see printed CA Issue. A solution of 150 mg, of 2',3'-diacetyluridine 5'-phosphate pyridine salt and 145 mg, of 5'-tritylthymidine in 3 ml. dry CSHSN with 306 mg. hexylcarbodithide was evaporated after 3 days and the residue treated with hot AΒ 80% AcOH to cleave the trityl group. After saponification (pH 13, 25°, 30 min.) the product was purified by ion exchange (Amberlite IR-120, H form) and paper (7:1:22-propanol-concentrated NH40H-H20) chromatography to yield 70% thymidylyl-(3' \rightarrow 5')-uridine (I), λ maximum 265m μ (50% EtOH). The mixed anhydride formed in dry dioxane from 0.065 millimole I and 0.13 millimole diphenyl phosphorochloridate was treated with 0.33 millimole Me phenylalaninate (II). The product was purified by paper chromatography as above to yield 50% thymidylyl-(3' → 5')-uridino-(P → N)-phenylalanine methyl ester (III), λ maximum 266 m μ . Hydrolysis of III in 0.1N HCl (1 hr., 70°) gave I and II. 14364-63-7P

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of)

14364-63-7 CAPUS Thymidine, 3'-ester with 3-phenyl-N-phosphonoalanine 1-methyl ester 5'-ester with uridine (8CI) (CA INDEX NAME)

ANSWER 65 OF 66 CAPLUS COPYRIGHT 2010 ACS on STN

AN 1966:68146 CAPLUS

64:68146 DN

OREF 64:12777g-h

Preparation of dicyclopropylcarbinyl phosphorochloridate and its use in phosphorylation reactions

Schoffstall, A. M.; Tieckelmann, H. State Univ. of New York, Buffalo AU CS

Tetrahedron (1966), 22(2), 399-406 SO CODEN: TETRAB; ISSN: 0040-4020

1.2 English

10/560.887

- CASREACT 64:68146
- Dicyclopropylcarbinyl phosphorochloridate was synthesized for use in phosphorylation reactions. This reagent and primary or secondary alcs. gave the corresponding esters. It reacted with primary and secondary hydroxyl functions of nucleosides to form nucleotide triesters. Dicyclopropylcarbinyl methyl phosphate was hydrolyzed by aqueous acid to monomenthyl phosphate. The nucleotide triesters gave free nucleotides in amts. reflecting their labilities in acid. Thus, uridine 5'-phosphate was produced in 53% overall yield from 2',3'-O-isopropylideneuridine, whereas thymidine 3'-phosphate was obtained in only 12% yield from -O-tritvlthymidine.
- (Derived from data in the 7th Collective Formula Index (1962-1966))
- 6773-50-8 CAPLUS Thymidine, 3',5'''-diester with 3-phenyl-N-phosphonoalanine methyl ester (7CI, 8CI) (CA INDEX NAME)

Absolute stereochemistry.

- ANSWER 66 OF 66 CAPLUS COPYRIGHT 2010 ACS on SIN
- AN 1966:68145 CAPLUS
- DN 64:68145
- OREF 64:12777d-q
- Dinucleoside phospho-(PM -> N)-amino acids
- ΑU Vorob'ev, O. E.; Sokolova, N. I.; Mel'nikova, V. I.; Shabarova, Z. A.; Prokof'ev, M. A.
- State Univ. Moscow
- SO Doklady Akademii Nauk SSSR (1966), 166(1), 95-8
- CODEN: DANKAS; ISSN: 0002-3264
- Journal T.A Russian
- For diagram(s), see printed CA Issue. Treatment of thoroughly dried 2',5-di-O-acetyluridine 3'-phosphate pyridinium salt with 2',3'-O-isopropylideneuridine (2 moles) in pyridine with N.N'-dicyclohexylcarbodiimide 7 days gave after an aqueous treatment and electrophoretic purification at pH 7.5, 30% I (U= uridinyl group), isolated as the Et3N salt, a colorless powder. This in Me2NCHO with (PhO) 2POC1 in the presence of Bu3N 2 hrs., followed by phenylalanine Me ester overnight, gave after electrophoretic purification at pH 7.5, 10% II (U = uridinyl group), which in 20 hrs. at 37° in bicarbonate-carbonate buffer at pH 10.5 gave phenylalanine and uridilyl-(3' \rightarrow 5')-2',3'-0-isopropylideneuridine in nearly 100% yield. Similarly, thymidyl(3' \rightarrow 5')-thymidine NH4 salt, converted to trioctylamine salt, was treated with (PhO)2POC1 to yield 70% III (T = thymidyl group), as above. The uv spectra were reported. III was fairly stable in an alkaline solution
- (Derived from data in the 7th Collective Formula Index (1962-1966))
- 6773-50-8 CAPLUS Thymidine, 3',5'''-diester with 3-phenyl-N-phosphonoalanine methyl ester CN (7CI, 8CI) (CA INDEX NAME)